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HIGH FIDELITY

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Schubert: A Quintet

November 19 marks Schubert's sesquicentennial deathday. While it may at first seem a bit ghoulish to celebrate such an event, as musicians and musical organizations have been doing all year, any excuse to draw more attention to Schubert's music must be commended. Yet who can think of what is being commemorated without feeling the profoundest sadness? Schubert was barely out of his twenties when the flood of his creativity was stemmed.

We note the anniversary this month with David Hamilton's exploration of a single Schubert song. David examines "Im Frühling" much as a doctor would perform a biopsy, with an eye to what it reveals about the whole body of Schubert's work and his special genius.

I too would like to call your attention to a Schubert work, possibly the most gorgeous piece of music ever composed, and one I am always surprised to discover is unfamiliar to many music lovers: the C major Quintet. It is a favorite among chamber music enthusiasts, and a string player need only pass the word around that "I've got the music and a second cellist" to be assured of a gathering of his colleagues. Arthur Rubinstein once expressed the hope that it would be played for him while he is dying, so as to ease his way into heaven. And, like that other C major masterpiece, the "Great" Symphony, written at about the same time, it illustrates Schumann's famous dictum on Schubert's "heavenly length."

Imagine Schubert creating one of the most exciting, rhythmically impulsive opening movements in all chamber music—all right, make that all music—a movement that also contains the most romantically luscious tune ever penned for a chamber music work. Then imagine his topping it with a second movement even more beautiful, and you have some idea of the special place this two-cello quintet has in chamber music circles.

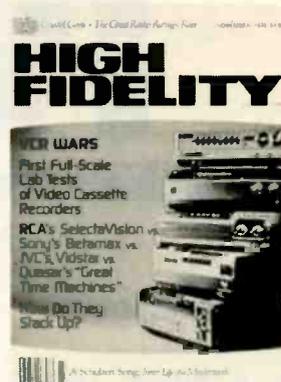
It begins allegro, but only the players feel that lively pulse, since the listener just hears measure-long chords. Schubert gradually lets you become aware of the tempo, then, suddenly, the music bursts into a frenzy of excitement. This passion spent, we come to the Tune, inevitably introduced by two instruments attacking the same note only to melt away from each other to expose a duet. For the Tune is really the Duet, and when it is first played by the cellos one realizes why the quintet calls for its unusual scoring.

The second movement, which must have been what Rubinstein had in mind, is, unbelievably, even more gorgeous than the Duet. Like the first movement, it begins with the basic tempo veiled, only this time it sounds faster than it turns out to be. You hear a leisurely dialogue between a violin and a plucked cello accompanied by a long-held chord in the background. After as much as a quarter of a minute (depending on the performance), the chord moves and you start to be aware that *that* is the melody, long, lush, and very slow. The canvas, as it were, has turned into the painting. The third movement, with its twentieth-century harmonies, and the gypsy dance finale are as inspired as the first two movements.

Someday I hope to hear a totally satisfying recording. My main disappointment comes in the final movement, where the gypsy quality is almost always lost. I was spoiled by once hearing a performance with the Pro Arte Quartet, during the Rudolf Kolisch era, in which the players hesitated slightly before selective downbeats and prolonged selective second beats, thus rendering the movement a wildly dancing climax to the great quintet. That said, I have enjoyed the Amadeus on DG and the Guarneri on RCA, among those currently available; Shirley Fleming has praised the Juilliard (on Columbia) in these pages.

As a matter of fact, I have enjoyed, and can recommend, every recording of the work. For the music it contains.

Leonard Marcus



Design by Sarina Bromberg;
photo by Roy Lindstrom;
for more information, see
Video Topics, page 32

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Neither is the way Technics RS-631 keeps music on pitch despite load, temperature and AC line fluctuations. Its secret is a frequency generator DC motor with the same type of speed control system used in many Technics turntables.

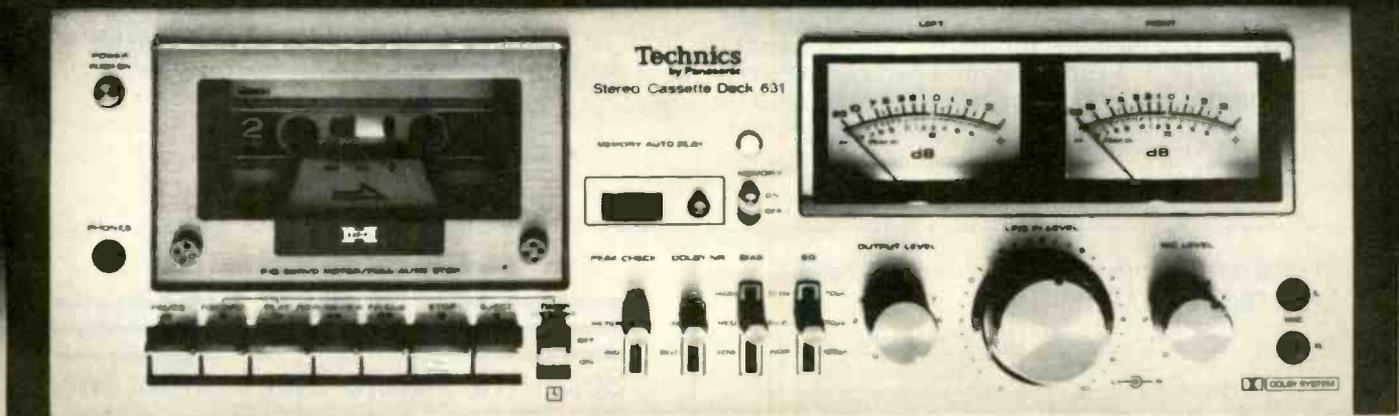
You'll also get an extended high-end frequency response that's virtually free from tape hiss as well as distortion. The reasons: Our patented HPF head, our low-noise, premium-grade transistors and Dolby NR.

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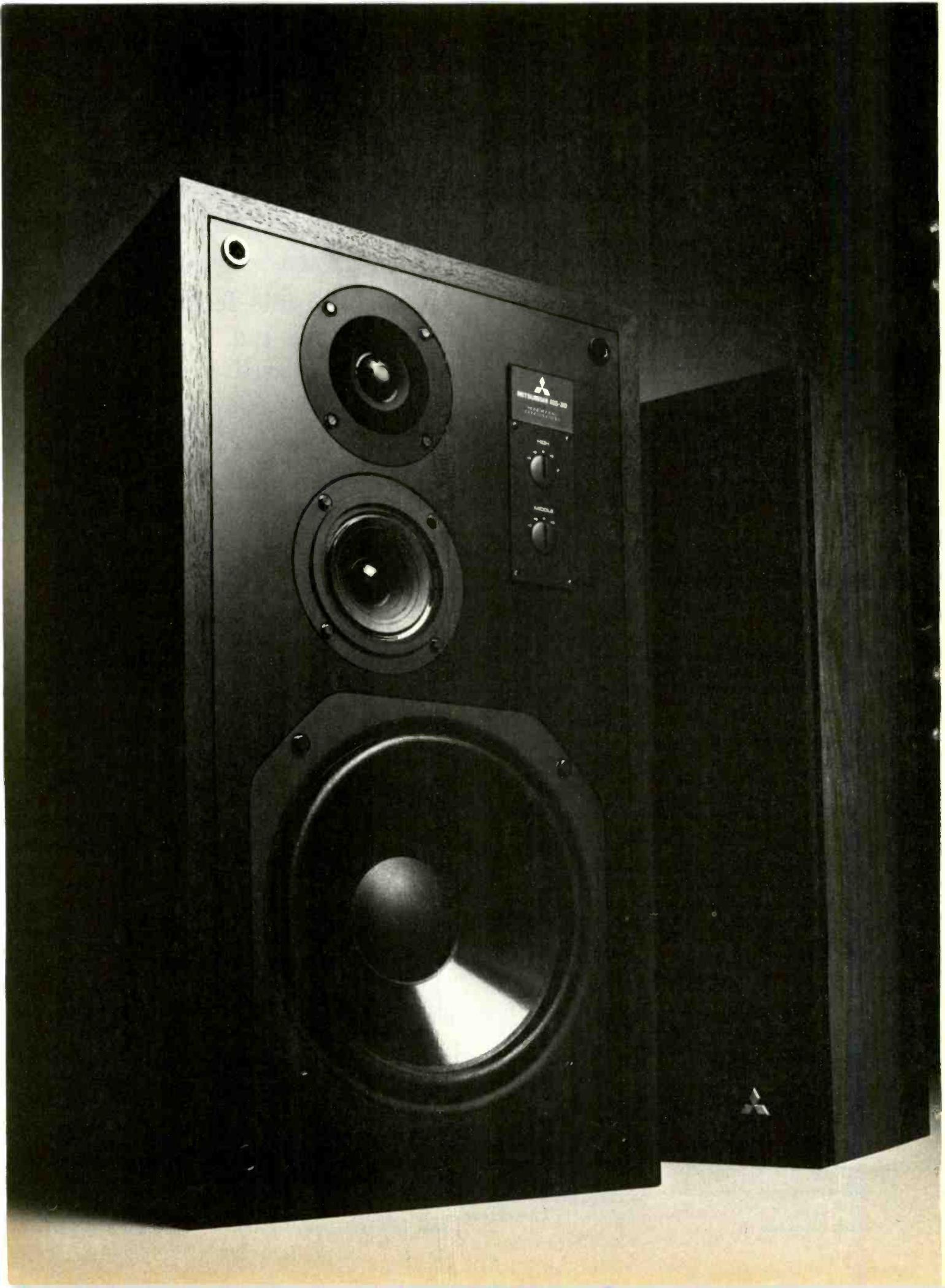


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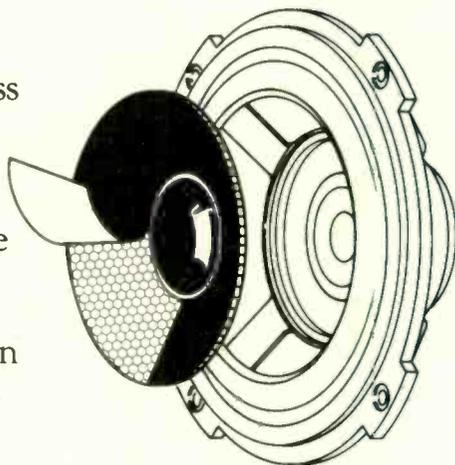
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Letters

The "English" Piaf

Many thanks for Gene Lees's thoughtful and provocative review of Peters International's release of the Piaf 1957 Carnegie Hall concert disc [September]. It's an index of Piaf's genius that critics probably will continue to argue about her for at least another generation; it's an index of Lees's genius that, in getting readers to think about his subjects, he tends to turn whatever controversy is engendered toward himself. And my first impulse is to argue with him, despite the manifest truth of much what he has to say.

Obviously the question of translations is a vital one for the absorption of *chansonnette française* by an English-speaking audience. Piaf never found an adequate answer. Aside from the inherent problem of linguistics, her approach to the English versions often suggested a totally different persona: sentimental and often extremely corny (to that extent, the *Time* critic was right), whereas that for the original had been wiry, vulnerable, and bitter.

Even Johnny Mercer inflicted this transposition of values on "*Les Feuilles mortes*" to some extent. It is easy to agree with Lees that Mercer did an exceptional job with "Autumn Leaves," but his lyric can't approach the Prévert original. Seldom has a poet of Prévert's talents produced such a large corpus of popular song. It's interesting to note that "*Les Feuilles mortes*" was written for a film called *Les Portes de la nuit*, which I'm told was to have starred Yves Montand and Marlene Dietrich. Montand appeared in it, but—the story goes—negotiations for Dietrich fell through. If they had not, Prévert's work might have been more familiar to more Americans sooner than it was. But, again, one wonders how the problem of translations might have compromised the film here as it compromised both Dietrich—in such essentially untranslatable songs as "*Ich bin von Kopf bis Fuss auf Liebe eingestellt*" ("Falling in Love Again")—and Piaf.

Part of the difficulty is cultural and economic. It seems that, in the brains of even the most creative American songwriters, some residual consciousness is always pointing out the commercial potential of lyrics that can be embraced as "our song" by millions of couples. Even in musical comedy, where one character is singing to another in a particular context, the overwhelming emphasis has been on the universally adaptable lyric. Smoke can get in anyone's eyes.

And that approach deeply colors Piaf's English translations, though it has little if anything to do with the *chansonnette* tradition in general or Piaf's French repertoire in particular. Among the great French performers—Yvette Guilbert, Mistinguett, Piaf, and even Trenet, Henri Salvador, and Montand (Charles Aznavour's distinction be-

tween male and female singers, as quoted by Lees, is a point well taken)—the emphasis is on the communication of a specific inner perception by the performer to the listener. Specificness, not generalization.

While anybody can associate with June/moon/spoon, Piaf's characters seldom can find a similar resonance in appreciable numbers of listeners, for all the songs' variety. There is the good girl who bitterly envies the life of the kept woman across the street. There is the woman who still yearns for her Legionnaire who "smelled of hot sand." There is the schoolgirl who dreamed of being followed home by some dashing rake, only to discover that the footsteps behind her are those of a dirty old man. There is the tale of Mr. Lenoble and what he thinks of as he turns on the gas and gradually drifts into oblivion after his wife has run off with a young artist. There is that of the dance hall girl who has let herself get hung up on a no-good customer whom all her friends have warned her of. Nothing comparable exists in American popular music (not even "Ten Cents a Dance" really comes close)—perhaps not in the popular music of any other part of the world. With the possible exception of "*La Vie en rose*" (which was said to be considered as an "our song" by gays in some places), Piaf's French songs never sought or achieved the sort of generalization that her English versions often affected—perhaps in deference to what she considered to be American taste.

The curious thing is that rock, at which Lees takes a swipe at the end of the Piaf review, is one area where some elements of this French specificness can be said to have tinted American music. While the "story song" has moved from country into rock, most examples tend to be far broader and less specific than Piaf's. But at least many of the lyrics address themselves to specific segments of the listening population. One reason rock has been so powerful a force is precisely because it emphasizes the values of one generation and rejects those of the previous one, whether the issue be Vietnam, marijuana, or lovemaking. June/moon/spoon was for all generations—for Master and Miss Middle America as well as their parents and grandparents. To that extent, rock shares with Aznavour the distinction of maintaining (at least partially) the values of which Piaf was the apotheosis.

P. McCallum
Rockville, Md.

Dolby FM

A number of points in John Higdon and Stephen Waldee's letter about Dolby FM broadcasting [August] require some clarification. We do not regard (and, to our knowledge, neither does Orban) the Dolby FM process competitive with or an alternative to devices like the Optimod. We agree that there is a handful of devices (includ-



Wow & Flutter: 0.05% (7 1/2 ips)
 Signal-to-noise Ratio: (3% THD, Wid.): 65dB
 Frequency Response: \pm 3dB (Hi-Energy Tape): 30-24k (7 1/2 ips)

The A-6600 isn't the only auto-reverse deck. It's only the best.

Or to put it another way, the A-6600 is one-of-a-kind. Period.

Sure, there are other decks that reverse automatically. But the A-6600's three-motor transport system was developed specifically for bi-directional play; two capstans pull the tape, one for each direction. Naturally, there's a heavy-duty servo-controlled DC capstan motor to provide smooth, precise tape movement. And just like a professional mixer, there are master gain controls for both mic and line inputs, plus separate left and right channel input level controls.

When you're taping from the radio or records, the "Auto-Space" feature

is an extra feature you'll love. When you stop the deck between selections, you can automatically add approximately 3 to 10 seconds of quiet space, so you're all cued up for the next selection.

You can monitor tape or source signals either pre or post output level, setting, and you don't have to reverse the deck to hear if there's music on the other tracks.

Clearly, the A-6600 is not just a "convenience" machine for people who don't want to get up to flop reels. It's a professional-quality computer-designed tape recording and play back deck, which happens to also play both ways automatically. Truly, one-of-a kind.



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Reminds you to remove cassette to prevent damage to pinch roller and capstan (a major cause of wow and flutter). Program lights flash, speakers beep when ignition is turned off.

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Separate power amp installs in trunk. Provides up to 60 watts of Total System Power.

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Divides and sends correct frequencies and power levels to respective drivers through four separate amps (2 for highs and 2 for lows).

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Loudness.

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Monitor-quality FM broadcasts with superior sensitivity and pinpoint selectivity... from an FM multiplex section designed to the same exacting specifications as your favorite home receiver.

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And just listen to the revelation of wide range signals stored in your favorite tapes... and encoded FM stereo broadcasts... through the

receivers for your car.



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Tuner.
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Eliminates inter-station noise when changing stations.

FM/AM.
Feather-touch electronic switching.

Stereo Receivers.

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ville, and *La Fille de Madame Angot*. These I received in record time (costing me \$16, however, for three little paperback book-

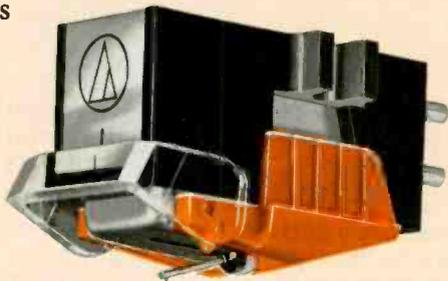




Q • Where should you start in your search for better sound?

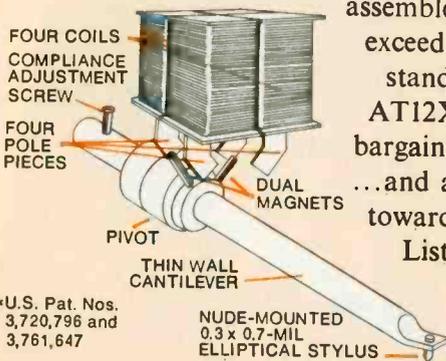
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CIRCLE 12 ON PAGE 141

lets). The publisher is Librairie Théâtrale, 3, Rue de Marivaux, Paris 2, France.
A. B. Gregory
San Jose, Calif.

I recently purchased Columbia Masterworks' release of Shostakovich's *The Nose* (M2 34582). I did not get the Electrola version because it lacked an English translation. But the Columbia contains no text, no transliteration, and no translation. Is it possible to purchase a libretto through the mail? Can you supply an address and a price?

Alexander Rysman
Brockton, Mass.

The U.S. rights to the libretto of *The Nose* are the subject of a battle between publishers. Columbia had the choice of releasing the opera without a libretto or not at all. For several months the company opted for the latter but, after the *Melodiya* album won last year's HIGH FIDELITY/International Record Critics Award, decided to release it anyway. Any purchaser who writes to Columbia (CBS Records, 51 W. 52nd St., New York, N.Y. 10019) will be put on a mailing list to receive the libretto when the legal situation is cleared up.

More Weill Music

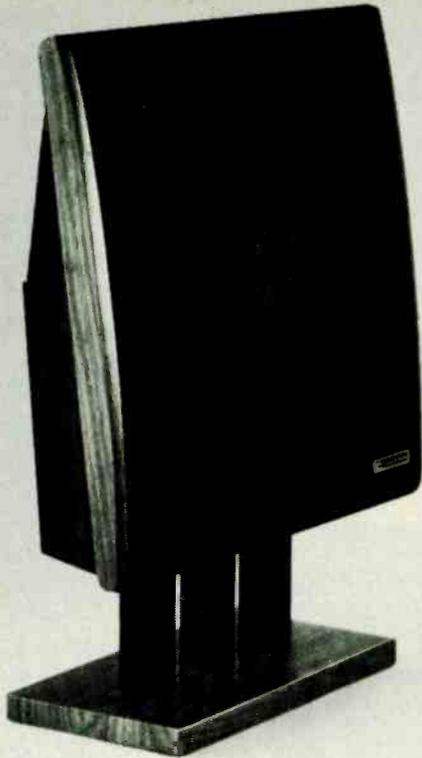
In addition to Kim Kowalke's discography, "Kurt Weill's European Legacy" [July], two songs from *Marie galante*—"Le grand lustucru" and "J'attends un navire"—are available on an all-Weill album by Laura Betti with an orchestra conducted by Bruno Maderna. This Italian release (Orizzonte ORL 8028), once distributed in the U.S. by Peters International, also includes songs from *Der Silbersee* and *Seven Deadly Sins* (I *Sette Peccati Capitali* or *Seven Capitalist Sins* here) as well as five songs from three American musicals.

Jerry De Muth
Chicago, Ill.

We are informed by Peters International that the disc, though no longer available in this country, may still be distributed abroad by Ricordi.

Desmar Stoky Offer

Desmar Music has had its recent releases manufactured in Germany, with an identifying "G" suffix in the record number, and the immediate news is that DSM 1007, the Stokowski recording of the Rachmaninoff Third Symphony, has been superseded by DSM 1007G. Desmar offers to exchange the German pressings for the American for "a nominal charge of \$3.50 postpaid"; send the disc only (without the jacket) with payment—postmarked by November 1—to Desmar Music, 155 Ave. of the Americas, New York, N.Y. 10013. Don't pester your dealer; the change can be made only through Desmar.



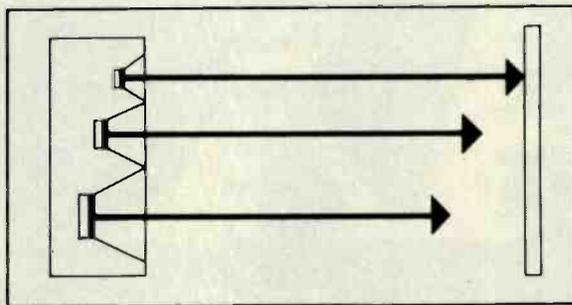
The Dahlquist DQ-10. It's about time.

What accounts for the superb performance of the DQ-10? The precisely matched transient characteristics of its five drivers are one reason. The rugged crossover, using oversize components and now equipped with mylar capacitors is another.

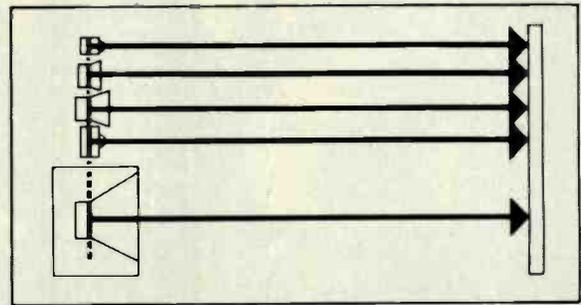
But the DQ-10 reproduces music with unprecedented clarity and spaciousness. The explanation lies in Dahlquist's solution to the problems of time delay *and* diffraction delay distortion.

Here is the speaker system that eliminates inaccurate reproduction caused by time elements.

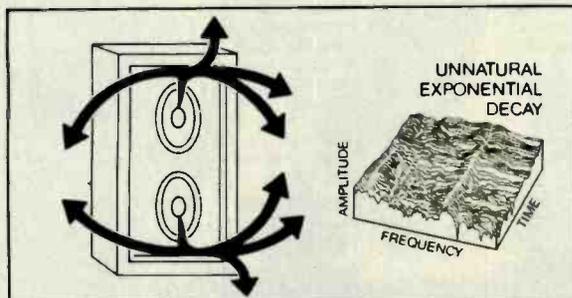
The DQ-10. It's about time.



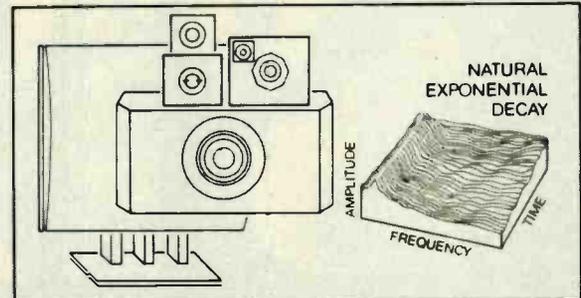
Conventional Driver Mounting in a common flat baffle. Smaller drivers have lower mass and shallower cone surfaces. High frequencies arrive earlier than lower frequencies, harmonic overtones before fundamentals. This is time delay distortion.



The Dahlquist Solution. With Phased Array™ Mounting, drivers are positioned so that all frequencies (fundamentals and harmonic overtones) reach the listener at the same time. Musical sound is in phase.



Diffraction Delay Distortion. In conventional speaker systems, sound wave energy radiates across the speaker baffle to the edges of the cabinet and is diffracted. These secondary signals create unnatural exponential decay and destroy clarity and spaciousness.



The Dahlquist Solution. In the DQ-10, the staggered baffle plates are sized to minimize diffraction. It is as though the drivers are mounted in free space with no nearby obstructions to distort the pure sound source. Sound decays naturally.

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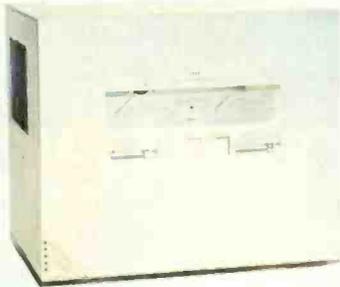
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Bellingham
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Bellingham
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Bremerton
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DA-80M(a): 90 watts rms mono. The absolute ultimate sub-woofer amp. A pair does just about anything. (right)



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DA-80(a): Dual power supply for discriminating audiophiles. 45x2 watts rms (left)



SR-44 Earspeakers (above): An outrageous bargain at \$110. This electret outperforms others at twice the price.



SR-X MkIII Earspeakers (right): The world's reference electrostatic headset.



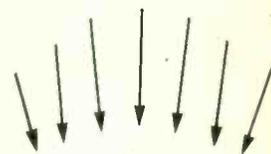
UA-7cf Tonearm: Non-glorious excellence.

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(a) Since music "touches" the ear from multiple directions, and since music is typically a "frontal" directional experience, (b) the "earmuff syndrome" of direct radiating headphones is non-physiological. The "orchestra-in-the-cranium" leaves reality far away, and instrument placement is impossible. (c) Enter the Stax SR-Sigma! It "presents" the program to the ears in an algebraically developed angle. Accurate tonal bases—instrument placement—physiological accuracy—all characterize the Stax SR-Sigma Electrostatics. \$450 with SRD-7 adaptor.



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American Audioport, Inc.,
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But so do many other receivers.

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Why does Harman Kardon sound better?

It starts with ultra-wideband frequency response and remarkably low TIM (transient intermodulation distortion) and SID (slewing induced distortion). But these are merely minimum design parameters for Harman Kardon engineers.

Of course, it is possible for our engineers to build adequate receivers where others build them — in the laboratory. But that's not where you build exceptional ones. You make them in the listening room.

But not just when the receiver design has been

completed. Listening at every stage of development is critical.

The fact is that transistors with the same specifications, but from different manufacturers, vary in ways that affect the texture of music. That's why Harman Kardon engineers actually listened for the *musical character* of every component — singly and in combination — that went into the audio chain of all our new receivers. Every transistor. Every capacitor. Every resistor.

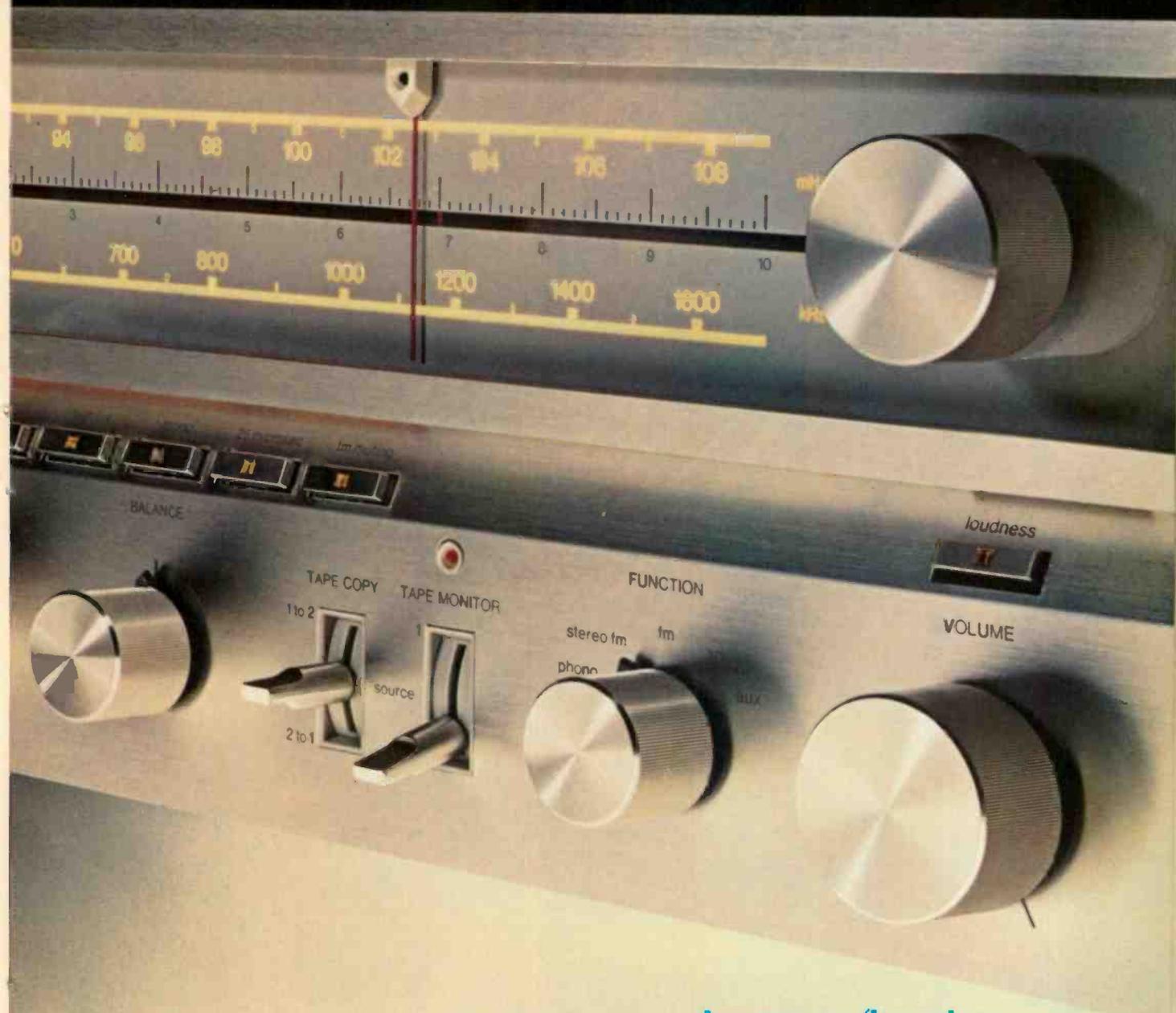
They listened for the subtle differences in component parts that make the immeasurable difference in the final product — changing, refining, in effect tuning the instrument until a receiver emerged that sounded exactly the way they wanted it to sound.

In short, it's not just great specifications that make the difference — it's listening to those things that others tend to take for granted.

Listen to the difference yourself. Visit your Harman Kardon dealer today.



*Pictured: hk670 receiver 60/60 watts
Not shown: hk340 20/20 watts, hk450 30/30 watts,
hk560 40/40 watts*



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He disappeared right in the middle of Tchaikovsky's "1812 Overture." The victim of a low definition cartridge.

But he could have been saved by the audio engineering achievement in the ADC patented induced magnetic cartridge.

With today's sophisticated "direct to disc" records it takes a state of the art cartridge to accurately capture the sonic quality of the recordings.

ADC has developed a unique design that sets the new

standard of excellence.

The remarkable ZLM model features an "ELLIPTIC" stylus design that effects the optimum balance between the stereo reproduction advantages of the elliptical stylus, high frequency tracing shape and the longer, lower wearing vertical bearing radius typical of the Shibata shape.

The result: unparalleled definition and clarity of sound and unsurpassed record protection while tracking at $\frac{1}{2}$ to $1\frac{1}{2}$ grams.

Because of its ultra linear

frequency response, flat ± 1 dB 10 Hz to 20 kHz and $1\frac{1}{2}$ dB 20 kHz to 26 kHz, every instrument sounds alive and natural.

If you'd like the complete facts about the ADC ZLM cartridge, simply circle our reader service number on the reader service card, and we'll send you the ADC brochure and a free record care gift.

Be nice to tuba players and other musicians. And invest in something that understands them, and protects them.

An ADC cartridge.



ADC

A BSR COMPANY

Winterreise on Stage and Screen

Culshaw
at Large

by John Culshaw

MELBOURNE—I understand the view of a German lady who had lived for many years in Australia that the prospect was outrageous, and also that of an eminent professor of arts in Melbourne who said it would take place over his dead body. (He is alive and well and still eating Australian pies.) I even accept the comment of an English critic who, in 1970 and before the initial event, predicted that it would cost me my job, which it certainly didn't. Their advance reactions arose from apprehension. Mine derived from sheer terror.

It was in the late Sixties when Peter Pears and Benjamin Britten suggested a performance of *Die Winterreise* on television. I had produced a recording with them some seven years earlier, and when I was put in charge of music for BBC television it was logical that they should approach me. Well, why not? I knew that they gave a marvelous performance of the cycle and that the idea would not be rejected by my superiors. Then came the buts, and the terror: Would *Winterreise* in German sustain on television for its seventy-three minutes? There were very few practical shots, and all of them dull: a closeup of the singer, either head on or in profile; a double-shot of singer and pianist; or a closeup of either the pianist's face or fingers. Did any of them, I asked myself, add anything to Schubert's masterpiece? And what about the sound? On television it was bound to be inferior to the records we had made and to any performance broadcast on FM stereo.

It then struck me that *Winterreise* tells a story—the story of a man doomed to the life of a wanderer because of rejection in love. From that came the visual notion of dressing him in a timeless sort of cloak and placing him in a different abstract setting for each of the twenty-four songs. It followed that the piano would have to be out of sight, because you cannot mix the conventions of a timeless traveler in costume with someone (even Benjamin Britten) playing a Steinway. Thus was born the idea of a “visualization” of *Winterreise*. Both artists welcomed it with enthusiasm, and it was a success.

Let me stress here that the essence of the approach was to put the emphasis on the music. Schubert's traveler never moved. He was in a different position vis-à-vis the lighting and the abstract images for each song; but he never, as people supposed he might, walked about or engaged in histrionics during a song. In other words, I was trying to encourage a television audience to experience something that, had it been seen in an ordinary recital platform situation, might have produced the biggest turnoff of all time: Those who knew the piece would have preferred to listen to their records and those who didn't would have been bored or bewildered—or perhaps both.

In 1977 I was invited to try a similar approach on-stage in Perth, in Western Australia. The first thing to be said is that to present it on television is child's play compared with the theater. For television I used lighting rather than projections, because projections bright enough to register for the cameras would have ruined my whole conception, which was that Schubert's traveler is in some kind of limbo. So for television I was able to set up and relight for each song, but in the theater you must go ahead, even if the projections go berserk.

By one of the wildest of coincidences my designer in Perth, Paul Green Armytage, had worked in London several years earlier with my BBC designer, David Myerscough Jones, and although the stage concept was quite different from the television there seemed to be an uncanny psychological connection. For television, David had constructed a single set that responded differently according to how it was lit; Paul, for the stage, devised a series of screens for projections. They could provide a severed or entirely merged image, although there was never a one-dimensional (cinema-screen) effect. The problem was where to project from. Front projection was impossible, because the image would have fallen upon the singer; and back projection was equally impossible simply because of lack of space—any theater with enough throw to make back projection pos-

sible would, by definition, be too large for an intimate work like *Winterreise*. Then there was the problem of the piano. It had to be invisible and yet close enough to the singer to provide musical contact. The solution was to put it behind an acoustically transparent screen. And the multiple projections (remotely controlled) had to come from within the auditorium, which meant building huge baffles to diffuse the sound of the blowers.

All of which brings me to Melbourne, where I have just presented *Winterreise* again. The trouble with projecting from either the sides of the auditorium (Perth) or from the wings (Melbourne) is that the beam angles are geometrically crazy. The already abstract paintings coming from the four projectors have to be further distorted in order to come out correctly on the screens and without ever hitting the figure. The singer cannot see what is happening behind him, and the pianist takes his cue from a prompt light. Yes, I know it sounds like a nightmare and an unnecessary one at that, but it happens to work. And I do not say that as self-advertisement.

Having had three goes, I do not particularly want to attempt *Winterreise* again. But it strikes me that the approach could apply equally well to many other works. What about Britten's *Serenade for Tenor, Horn, and Strings*, or his *Nocturne*? Or *Dichterliebe*? Once you start thinking about it, the list is almost endless—and challenging. The secret is that, whatever the music is, the approach must not be visually memorable in detail. Shock effects are out, and the music always comes first. I have a video cassette of the Pears/Britten *Winterreise*, and although I directed it and know all its faults, even I cannot remember what is coming next. Maybe I am pleading a special, esoteric case, but in the theater presentations in Perth and Melbourne a few people were crying, for the right reasons, after *Der Leiermann*. After all, it was Schubert who said: “I'm going to sing you some terrifying songs. . . .” It apparently does no harm to see, as well as hear, his doomed lover. ●

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The new Sonus Gold consists of three models with identical bodies and stylus assemblies, differing only in the form of their diamond tips. The new Sonus Silver comes in two stylus types, and shares all the qualities of their more costly counterparts, yet still can offer a dramatic improvement in sound reproduction overall. Both series employ a transducer system characterized by reproduction of exceptional accuracy, clarity and definition. For full details and a recommendation of which model is correct for your particular system, we suggest a visit to the Sonus dealer nearest you, or write us.

SONIC RESEARCH, INC., Sugar Hollow Rd.
Danbury, Conn. 06810

SONUS

High Definition Phono Cartridges



Too Hot to Handle

I diligently follow Sonab's tape recommendations for my C-500 deck: Maxell for normal bias and TDK for chrome bias. Although I have had my meters recalibrated, playback levels don't match those in recording. I allow for an occasional peak of +1 or +2 dB on recording; on playback, the meter reads +3 dB or more on these passages and correspondingly higher throughout the recording. There is no evidence of distortion or saturation, but I have a nagging fear that my meters may eventually be damaged. A friend also encounters the phenomenon with his C-500.—Larry E. Nordgaarden, Bozeman, Mont.

Relatively few decks show the same meter indication on playback as they do in recording. Essentially, it's a matter of economics. Almost every deck has internal controls to calibrate the meters in the recording mode. These are factory-set to compensate for variations in gain in the recording and meter amplifiers and for production tolerances in recording-head efficiency. There also are variations in playback-head efficiency and in playback-amplifier gain. When the meter is switched to indicate the playback level, it may or may not result in the same reading as that given on recording. A second internal calibration control would be required to compensate for playback tolerances, and few decks seem to include this extra. (The exceptions usually are decks with Dolby-calibration controls. It is important that the playback level be determined accurately for correct Dolby operation.)

The actual meter reading on playback is relatively unimportant provided you use the tape for which the deck was calibrated—and assuming it was properly calibrated. Evidently you fulfill both conditions. So stop worrying. Your meters are not likely to be damaged.

Your report on the Shure V-15 Type IV [June] is the second rave review I've seen on the cartridge. But neither answers a critical question. As the owner of the Type III (in a Dual 701), I have found that the older cartridge often successfully negotiates an atrocious warp on the outer edges of a disc. But almost invariably in piano or harpsichord selections, this is accompanied by an equally atrocious fluctuation of pitch as the note is struck and decays. I take your word for it that the Type IV tracks warps well. But does its damping system also eliminate the pitch flutter? And does the Type IV aid in reducing the same pitch problems created by the all-too-ubiquitous eccentrically pressed disc?—Marvin Hightower, Somerville, Mass.

The Shure V-15 Type IV does in fact reduce the wow produced by vertical warps, in most

cases to negligible proportions. Off-center pressings, however, will produce equal wow (ignoring any that is warp-induced) with any pickup. The only cure we know of for disc eccentricity is a platter with a removable spindle and near unlimited patience in hand centering.

I have a problem with RFI: When I turn up the volume of my system even to a moderate level, I hear a local FM station. This happens in the auxiliary, phono, and tape monitor modes. Nothing I have tried—shielded cables, etc.—helps. My equipment consists of a Fisher 450T receiver, Sony 126 stereo recorder, and a Dual CS-510 turntable with an Empire 2202E III cartridge. I also have two Marantz Imperial 4G speakers.—George Snover, Memphis, Tenn.

Since your RFI problems occur in all modes, we suspect that the speaker wires are picking up the interference and that it is being detected in the power amp of the receiver. Make sure that all connections are securely made and that the system is grounded. Try rerouting the cabling to see if that helps. If all that fails, contact the station. Its engineers may be willing to help design a suitable trap.

I recently purchased a Sony TC-205 monaural cassette tape recorder. I was told by the saleslady that the recording head was not made to be used with any C-120 recording tape because the tape is very thin. Is she right? If not, is there any reason why a two-hour cassette should not be used in this recorder?—Richard S. Mitchell, Chantilly, Va.

The problem is not with the recording head (although the ideal basis point for a C-120 may be different from that of a C-60 or C-90 of the same brand), but rather with the necessary weaknesses of the extra-thin tape: It follows guides in the tape path less accurately, snags and breaks more easily, and is subject to greater print-through. All but the last can be influenced by the design of the recorder and of the cassette shell, so some tape brands will give more reliable results on some decks than others. But since transports generally are engineered for the inherently superior C-60s and C-90s, using C-120s is relatively chancy at best.

I have noticed that several component companies, such as Kenwood and Pioneer, rate their phono signal-to-noise levels using a 2.5-millivolt reference, while others (Yamaha and Advent, for instance) use a 10-millivolt reference. Which is more useful?—John Merrell, Beaverton, Ore.

A good case can be made for either reference, and they are equally useful provided

The best tape decks in the world are only as good as this tape.

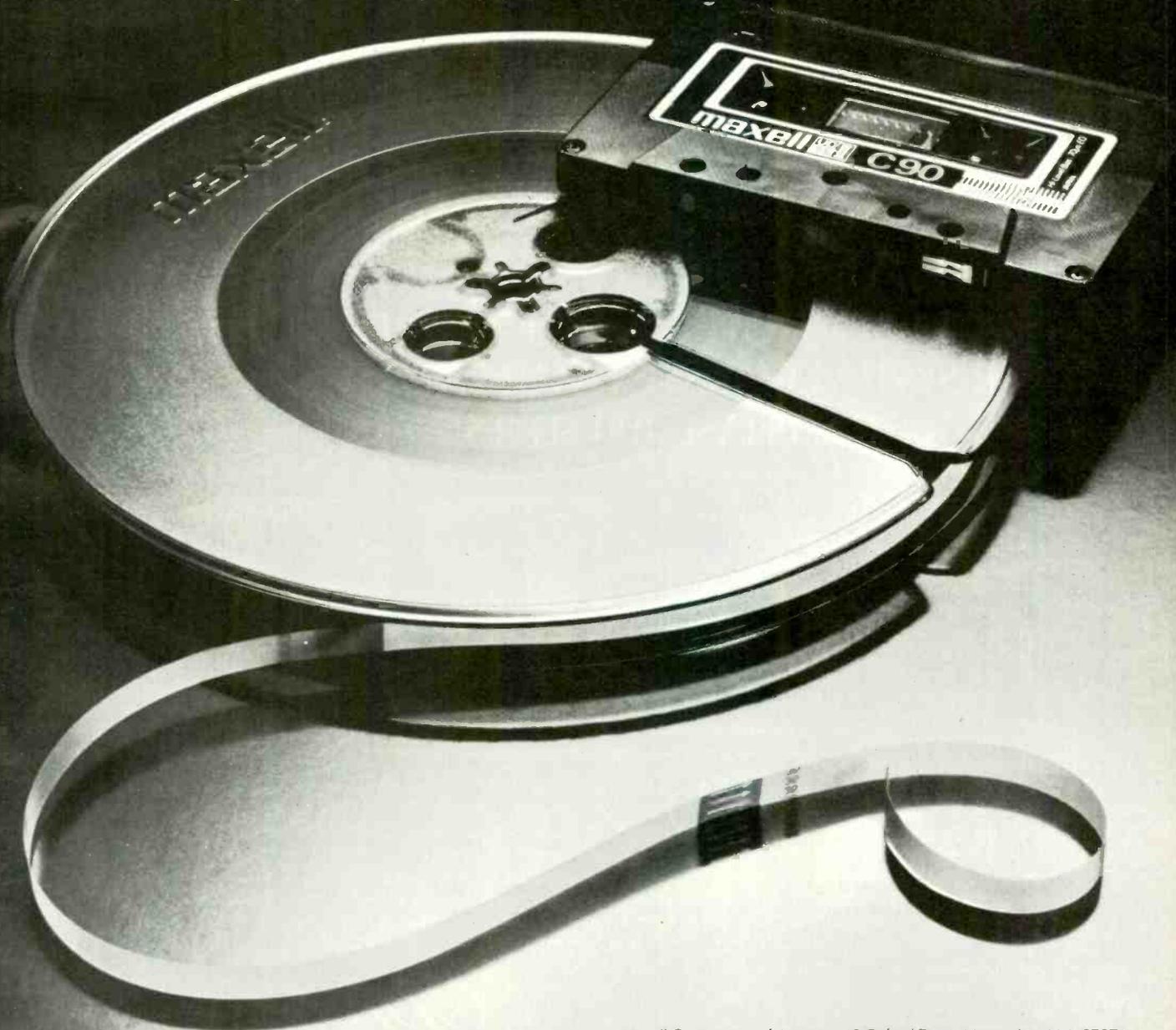
While there's a lot of controversy over who makes the world's best tape deck, there's very little over who makes the world's best tape. Maxell.

Because Maxell gives you the

widest frequency response, the highest signal-to-noise ratio and the lowest distortion of any tape you can buy. In fact, people who own the finest high-performance tape equipment use our

tape more than any other brand. So why buy one of the world's finest tape decks and get less than the world's best sound.

When you can use Maxell and get everything you paid for.



Maxell Corporation of America, 60 Oxford Drive, Moorachie, N.J. 07074.



that the difference between them is understood. The same phono preamp will show a S/N ratio 12 dB higher when referenced to 10 millivolts than when referenced to 2.5 millivolts. Thus all that is necessary to compare S/N specs is to subtract 12 from data measured at 10 millivolts or add 12 dB to those measured at 2.5 millivolts. The new IHF standard (and our current testing procedure), interestingly, splits the difference and sets the reference level at 5 millivolts, 6 dB above 2.5 millivolts and 6 dB below 10—though it includes other specifics that, while biasing the data toward "real world" conditions, may also prevent direct comparison.

I often am surprised by the low prices offered by American mail-order companies, but I wonder if any of the equipment they sell has switchable voltage settings (110/220 VAC). The ones I have written to did not answer this question.—S. Vejdemo, Ystad, Sweden.

Since legal requirements vary from country to country, the AC circuits often do too, even on models that are available internationally. In some parts of Europe, for example, the convenience outlets so popular here are outlawed. As a result, many receivers are sold here with the outlets and a 110-volt transformer, in Europe without the outlets and with a 220-volt (or a switchable) transformer. A mail-order house that deals in price rather than service generally cannot afford to open cartons in order to research this question,

and spec sheets generally remain mum on the point. Your best source of information would be the American companies manufacturing (or importing) specific models in which you are interested. But it's hard to believe that, by the time you add shipping and duty to American prices, they would be much lower than those in Sweden.

For those readers who are interested in owning Polk (or any other brand) speaker cable but are unwilling to pay the price, here is a solution. Obtain two lengths of thick-gauge cable—14-gauge zip cord will do. Run the two positive outputs from the amp along one side of the room on the two conductors of one length, and the two negative outputs around the other side of the room on the other cable, overlapping one conductor of each so that both speakers receive their respective positive and negative connections. Now you have no "skin effect" in the audible range, the capacitance has been reduced to zilch, and there should be no problem with resistance on short runs.—Linus Vytuvis, Equinox Audio, Woodhaven, N.Y.

Novel, but we fail to see how this will solve the problem—if indeed there is one. (For a full discussion of "skin effect" and other considerations that the special speaker cables try to address—plus an evaluation of several types—see our October issue, which had not yet appeared when Mr. Vytuvis wrote his letter.) As any adman will tell you, all

good amplifiers have an extremely high damping factor at all frequencies. (Ahem!) To the extent that this is true, the capacitance between the two "positive" wires (and between the two "negative" wires) is coupled through the essentially zero output impedance of the amplifier and appears across each output just as if conventional wiring had been used. Furthermore, the capacitance that now exists between the two outputs couples signal between left and right channels so that each output must work harder to "absorb" this crosstalk current; if it can't, the stereo separation will be impaired.

As for skin effect, we see no particular virtue to this arrangement. The skin effect will be the same as in a conventional arrangement if the same wire is used since it really is a property of the wire. (Wire composed of many fine strands has less skin effect than a solid wire of equivalent gauge.)

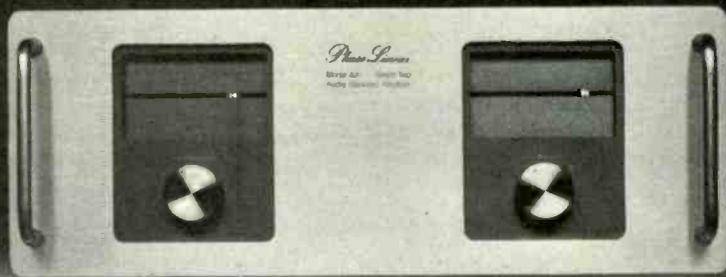
If you had been thinking of the inductance of the wiring, you've made matters worse since the self-inductance of a large-area loop (which is what you've created by running positive and negative conductors around opposite sides of the room) is greater than that of two wires in close proximity to each other.

We regret that, due to the volume of reader mail we get, we cannot give individual answers to all questions.

BEFORE YOU THROW OUT A GOOD TURNTABLE OR SPEAKER SYSTEM, CONNECT WITH A GREAT AMPLIFIER. THE PHASE 400 SERIES TWO.

Some speakers sound fine, until you hit a low passage. Then they turn to mud, or rumble at you like a cheap turntable. Chances are, that muddy, distorted sound is in fact, the result of an inadequate amplifier stretched to its limits. Clipping! To improve your sound, you need plenty of reserve power. The Phase 400 Series Two delivers the tremendous power reserve you need for sonic accuracy over the audible frequency spectrum. To accurately reproduce low frequencies without clipping, your speakers require up to 10 times the minimum power requirement of the mid-range frequencies. With the Phase 400 Series Two, when you listen to the 1812 Overture,

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If your choice is sonic excellence over watts per dollar, you'll prefer one of these LUX tuner/amplifiers.

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Our audiophile/engineers design for those subtle amplifier and tuner qualities that contribute significantly to sonic performance under actual musical conditions. We're interested in more than the way our equipment measures during sine-wave lab testing. We're vitally concerned with the way it performs in the real world with musical material.

So it's no wonder the acclaim that initially greeted our separate amplifiers and tuners has been matched by our combined tuner/amplifiers.

For example, *Stereo Review* said this about the Luxman R-1050: "The excellent audio-distortion ratings... obviously place it among the cleanest of the currently available receivers... operation and handling (is) as smooth and bug-free as its fine appearance would suggest."

High Fidelity described our R-1120 this way: "As beautiful to behold as to hear... an effortless quality to the sound that just radiates class... the

FM tuner is impressive, to say the least."

And *Audio* summed it up with this: "Lux seems to have the ability to produce product after product that just sounds better."

Our tuner/amplifiers come in a wide range of power to suit every need (and speaker efficiency) from a top of 120 watts per channel for the R-1120 to 30 watts for the new, modestly-priced R-1030.

Whichever of our four models you choose, you'll get only one standard of sonic excellence. LUX.

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Luxman R-1020. 120 watts per channel, total harmonic distortion no more than 0.03%.* Switchable turnover points. 12-LED peak level display with selectable sensitivity. Closed-lock-loop FM tuning circuit. Direct-coupled preamplifier equalizer stage and direct-coupled DC power amplifier. Outputs and switching for electrostatic speakers.

Luxman R-1050. 55 watts per channel, total harmonic distortion no more than 0.05%.* 12-LED peak level display with selectable sensitivity. Dual-gate MOSFET front end. Direct-coupled preamplifier equalizer stage and direct-coupled DC power amplifier. Connections for two decks, two phonos, auxiliary; tape-to-tape dubbing.

Luxman R-1040. 40 watts per channel, total harmonic distortion no more than 0.05%.* 12-LED peak level display with selectable sensitivity. Special negative feedback-type bass and treble controls. Tuner section with linear-phase filters and phase-locked-loop multiplex IC. Direct-coupled preamplifier equalizer stage and direct-coupled DC power amplifier.

And the new Luxman R-1030. 30 watts per channel. Our lowest-priced tuner/amplifier, yet total harmonic distortion is no more than 0.05%.* Among its features: our special negative-feedback tone controls.

*Minimum continuous power, both channels driven into 8 Ω -ms, 20-20 kHz.

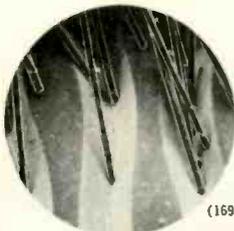


Take a close look at a better record cleaner. Audio-Technica AT6002



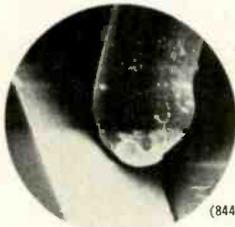
(84x enlargement)

This is an A-T scanning electron microscope photo of the dirt that must be removed if your records are to sound clean. It's dirt that is falling on your records even as you listen.



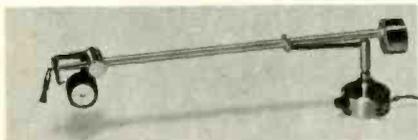
(169x enlargement)

Our unique carbon fiber brush sweeps each groove literally hundreds of times as the record plays, just *before* the stylus touches the groove. The carbon fiber brush helps conduct static charges away, making groove cleaning easier. And the incredibly small 6 micron diameter reaches deep into the groove for the smallest particles.



(844x enlargement)

Immediately behind the brush, our velvet pad captures and holds dust particles as you play. And moisture released from an inner reservoir helps to dissolve stubborn deposits to prevent static build-up.



This 4-way attack on dirt (brush, pad, liquid, and conductive path to ground) is uniquely effective. For proof, clean a record with any other system. Then "play" it with the AT6002. You'll find dirt removed by the AT6002 that was left behind by other cleaners. Try it today. Just \$12.95 at all Audio-Technica dealers.

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Video Topics

Color camera compromise. In the May issue we quoted RCA as saying that it would not introduce a color video camera until it could do so at \$500—a tall order when most models were selling above (often far above) \$1,500. But in the intervening months, the \$1,000 price barrier has been broken by several companies, and RCA evidently figures that an \$850 peacock in the hand is worth a \$500 flock in the offing.

This month's cover was shot using the result: the \$850 CC-001, a camera with a fixed focal length and an optical viewfinder. Like other lines, RCA also



includes a fancy model with a zoom lens and electronic (black-and-white CRT) viewfinder/monitor, the \$1,275 CC-002. Prices in other new lines are comparable; Quasar's lead the field at \$800 for the simple model and \$1,200 for the zoom. (Though we haven't examined all of the cameras in this price range, we would expect distinct similarities among them since they conceivably could all emanate from the same Japanese supplier.)

Before leaving the subject, we draw your attention to the deck shown in front of the model. It is RCA's VCT-400 SelectaVision VHS recorder (\$1,275), which features—among other things—a "programmer" that allows the owner to set it up for a week's worth of unattended recording. Any of the fourteen preselected VHF or UHF stations on the keyboard at the near right may be chosen—the channel is changed automati-

cally—in up to four on/off cycles. Maximum recording time in VHS, using its slower transport speed, is of course four hours with present tapes.

Put yourself on the tube. At the end of June, the vast Fotomat chain (3,400 stores, according to its press handout) announced that it would offer a new service, that of making VCR copies of its customers' home movies or slides. Both Beta and VHS tapes are available. One-week turnaround is promised, and the prices are attractive.

Regular and Super-8 movie films (sorry, 16-mm fans) cost less than \$15 for an hour's worth of transfer plus another \$15 or so for the cassette. (Fotomat also plans to market blank cassettes.) You can bring your own, but then there's a \$1.00 setup charge. Recordings can be made piecemeal; you can bring your partially recorded cassette back each time you have another 50-foot reel to be added, though total cost will be somewhat higher this way. Sound films will of course come with soundtracks; if yours are silent, you can add music or commentary afterward with the audio dub feature on many of the home decks.

You can do so, too, with tapes made from your slides—either 35-mm or 126 formats. Fotomat gives you the choice of 5, 10, or 15 seconds between slide changes (a single interval for any given batch) with cross-fades from one image to the next. (No more push-pull, click-click, flash-flash in your slide shows.) The more relaxed paces use up more tape and therefore cost more.

Our sister publication MODERN PHOTOGRAPHY noticed some loss of shadow detail and alteration of color values but commented that on the whole the results were quite agreeable. As our video cassette feature story in this issue notes, we found some losses even in dealing with video signals; working from a different medium—film—compounds the problem, so we wouldn't expect utter perfection in the transfers. Indeed one can't expect perfection even in photographic copies from photographic originals.

Professional equipment—comparable to that at broadcast stations, according to Fotomat—is used in the transfer, and some nice "extras" are thrown in. One is color correction, to compensate where possible for poor exposure or incorrect film choice for the light source. In addition, there is film cleaning and repair of damaged sprocket holes or, if the film is so badly damaged that it will not go through the projector at all, removal of the unusable section.

Continued on page 36

All the color, excitement and delightful musical variety of Fiedler's Boston Pops concerts—in the most complete library of his music ever assembled.

Having captivated audiences all over the world with their favorite music, Mr. "Pops" will now enchant you with his personal favorites. All the selections he loves most are here, including historic new recordings of Fiedler classics produced especially for TIME-LIFE RECORDS in Boston's legendary Symphony Hall.

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ARTHUR FIEDLER'S FAVORITES

on your choice of concert-quality LP Records or Tapes (cartridges or cassettes)

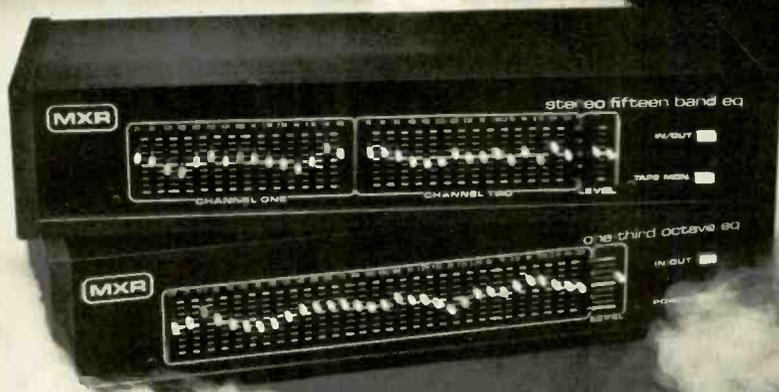


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 - Engrossing booklet on the music, prepared in cooperation with Arthur Fiedler

Most components just provide recreation

MXR provides Creation



Create with MXR's two newest equalizers, the Stereo Fifteen Band Eq and the One-Third Octave Eq. Two great new eqs that not only put you in complete control of your acoustic environment but provide even more creative contour of your music as well.

The Stereo Fifteen Band Eq is an expanded version of our popular ten band Stereo Graphic Eq. With two channels each having fifteen bands spaced 2/3 of an octave apart, you have even more creative power for bending, shaping, enhancing the sound. No matter how fine your home component system is, problems such as poor room acoustics or program quality may occur. The Stereo Fifteen Band Eq gives you the control to create the exact sound you desire.

The One-Third Octave Eq goes even further in providing precision control over your system's sound. A single channel unit, its thirty-one frequency bands are spaced 1/3 of an octave apart to give you the most creative power available at any price.

Both units feature a range of -12 to +12 decibels on each band, high slew rate (7V/microsecond) and incredibly wide dynamic range (better than 100 dB). The eqs feature walnut side panels (rack mounting hardware also included) and are built with rugged, reliable MXR quality.

Hear them perform at a fine audio dealer near you, or write MXR Innovations, Inc., 247 N. Goodman St., Rochester, N.Y. 14607.

In all of creation, MXR keeps providing.

Also distributed in Canada by White Electronic Development Corporation, Ontario.

MXR Consumer Products Group

Fotomat is by no means the only company offering such services. K.C. Video, Inc. (1029 W. Gregory Blvd., Kansas City, Mo. 64114) does it by mail order. Judging from the K.C. rate card, prices for many operations are comparable to Fotomat's, though some seem to be a little higher. Like Fotomat, it will copy movies at either 18 frames per second (the current silent standard, replacing the older 16 fps) or 24 fps (the sound standard). It offers copies on VHS (either speed), Beta I or II, U-Matic, and EIAJ open reels. (The last are not included in the rate card, but K.C. is willing to quote prices in reply to inquiries.)

Among the other companies we have noted in the field (we don't yet know how their prices compare with Fotomat's) are Teletronics Video Services, Inc. (2440 S. Wolf Rd., Des Plaines, Ill. 60018) and Columbia Pictures Video-cassette Services (1325 S. Arlington Heights Rd., Elk Grove Village, Ill. 60007), a division of Columbia Pictures.

GE's new wide screen. General Electric has had a projection TV system for some time. Now it has added an all-in-one home system that focuses its images, derived from a built-in 13-inch tube, onto the back of a scratch-resis-



tant acrylic screen rated at 1,000-plus square inches. (We make that the equivalent of a 4-foot diagonal or thereabouts.) The Widescreen 1000 Home Television Theatre (ahem!) is expected to sell for a retail price of about \$2,800, not including the VHS deck shown in the photo.

And then . . . Pioneer has plans to move into the video field. Its video disc system, among the least secret secrets in the industry, has not yet been introduced. Now the trade papers are abuzz that Pioneer is working on a large-screen system to get best impact from its discs when they arrive. ●

Until the Sound Guard™ record care work pad, one side of your record could take a beating while you were caring for the other.



A paper towel that could scratch. A piece of velvet that slips. A cloth of any kind that leaves telltale lint.

Until now, that's all you've had to lay your record on when you wiped, sprayed or buffed it.

Now you've got some-



The pad protects one side of your record while you're working on the other.

The pad holds the record gently in place for buffing or wiping.

thing that takes care of one side of your record while you're working on the other side. It's non-conductive to resist picking up particles

from dirty records. It's not a fabric, so it has no lint to spread around. And it's non-abrasive to avoid scratching and slipping when you're buffing.

Its ingenious channels give you another advantage. They collect any excess fluid so it won't run over to the other side of

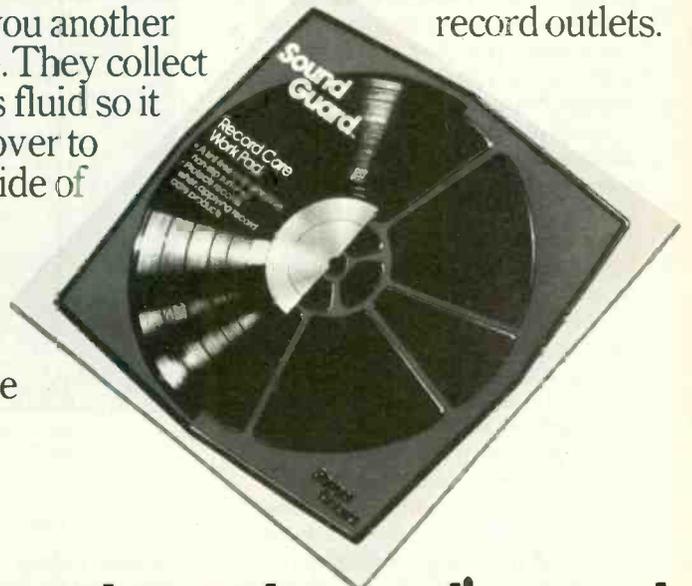
your record—or onto your furniture.

Wash off your record care

work pad, when you have to.

Use it as you're meant to, and your records will never take another beating.

Like all Sound Guard products, the Sound Guard record care work pad is sold in audio and record outlets.



Sound Guard® keeps your good sounds sounding good.



Sound Guard® preservative — Sound Guard™ cleaner — Sound Guard™ Total Record Care System — Sound Guard record care work pad
Sound Guard is Ball Corporation's registered trademark. Copyright © Ball Corporation, 1978. Muncie, IN 47302

See why TDK

It's the little things you can't see
that make a big difference in the way it sounds.

At first glance different brands of tape look pretty much alike. But if you look closely, you'll find there are many subtle differences. And it is these differences that make one tape stand out above all others.

Now you might not spend a lot of time looking closely at tape. But we have to—that's our business. At TDK we're committed to constantly improving our products. For years, our SA cassette has been the High bias reference standard for almost all quality cassette deck manufacturers. Yet we've incorporated improvement after improvement into SA's tape and mechanism since its introduction as the first non-chrome High bias cassette in 1975. These advances mean better quality sound for you. TDK makes this possible, by continuous attention to the little things you can't see.

The Particles

The lifeblood of recording tape is microscopic magnetic particles that can be arranged in patterns to store and reproduce sound. At best, they are as small as possible, uniform in size and shape; they are long and narrow (the greater the ratio of length to width, the better); and they are tightly, uniformly packed together, with no gaps or clumps.

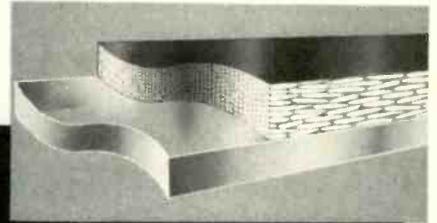
Over 40 years of experience in magnetic ferrite technology and 25 years in developing and manufacturing recording tape, bring the TDK SA and AD cassette particle formulations as close to these ideals as current technology will allow.

The TDK SA particle is a cobalt gamma ferric oxide compound made highly stable by our proprietary cobalt-ion adsorption process. The SA particle possesses one of the greatest length/width ratios of any particle used in audio cassette recording: an amazing 11:1. These little wonders are truly "state-of-the-art," and mean higher maximum output level (MOL), higher signal-to-noise and lower noise.

The particle in TDK AD is *pure* gamma ferric oxide; it has been developed specifically for use in Normal bias decks—in the home, car, in portables. With a length/width ratio of 10:1, the AD particle can deliver what most conventional cassettes lack: an extended, hot high end, to capture all the elusive highs in music, from classical crescendo to raging rock and roll. It is the logical successor to the world's first high fidelity cassette tape particle, TDK SD, introduced in 1968.

clumps nor gaps of oxide build-up. So we suspend our particles in a unique new binding, and we're fanatic about the way we do it. TDK engineers and craftsmen wear surgically clean robes and caps, and we vacuum the air to eliminate

Tape layers: coating (top); backing.



TDK SA tape surface (left) enlarged 30,000 times. TDK Super Avilyn particles (right) enlarged 20,000 times.

contaminating foreign matter and disruptive static charges. The high packing density that results means that the tape is prepared to handle high input level musical peaks gracefully, and without distortion.

The Base Film

We coat our oxides on broad rolls of supremely flexible, but nearly stretch-proof polyester film, to make sure TDK cassettes don't tangle or introduce wow and flutter.

The Polishing

After each roll is coated, it goes through a polishing process called "calendering." Any oxide is removed,

The Coating

To best attach the particles to the film used for backing, it's necessary to coat that film evenly, with neither

sounds better.

and the surface is smoothed to reduce tape head wear and oxide shedding. Reduced friction across the tape heads means lower noise.

The Edge

If you look closely at the edges of TDK's tape, you'll find that they are uniformly straight and parallel to a tolerance of one micron. That's because we slit our tape by pulling it across an array of precisely-positioned, surgically-sharp knives. That means the tape movement is unimpeded; and mis-tracking that could result in garbled stereo is eliminated.

The Hub/Clamp Assembly

TDK has met a major challenge which has always faced cassette manufacturers:

anchoring the tape to the hub without causing mechanical problems. We use a unique double clamp system we pioneered. It practically eliminates wow and flutter, distortion, drop-outs and other problems related to poor winding. Some manufacturers use plastic pins jammed into notches on the edge of the hub. This system can lead to uneven winding, which causes the edges to feather, the tape to bulk unevenly, and occasionally, to snap at the anchor.

The Cleaning

Like most leader tape, ours is designed to protect the recording surface from stress, and to provide a firm anchor to the hub. Unlike most leader tape, TDK's cleans your recorder heads as it passes by.

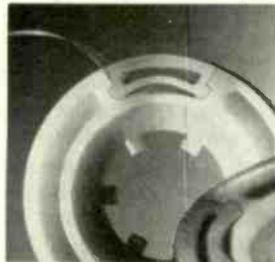
The Splice

Our splices are firm, with leader and tape lined up exactly. Our splicing tape is specially designed not to bleed adhesive into the cassette mechanism, which could gum up the works.

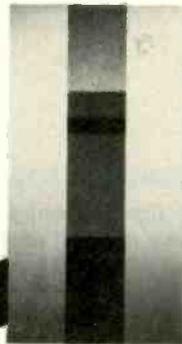
© 1978 TDK Electronics Corp.

The Inspection

Before any of our tape is loaded into cassette shells, it must pass a series of inspections to



The TDK double clamp system.



The TDK high tolerance tape/leader splice.

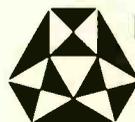
see if it matches up to our own rigorous standards. If it doesn't pass, it's discarded. We never compromise on quality.

The Music and the Machine

We go to more trouble than most companies do, when we manufacture our cassettes. We see to all the little details, so you can hear more of your music. Our super precision cassette mechanism delivers the tape to your heads precisely, without introducing friction, wow and flutter and other problems in the process. And we back that mechanism, and the tape within it, with high fidelity's original full lifetime warranty*, a measure of the value we have placed in our cassettes, for over 10 years.

So next time you buy cassettes, look closely at TDK, and think of all the little things you can't see that make our cassettes just that much better. TDK Electronics Corp., Garden City, NY 11530. In Canada: Superior Electronics Ind., Ltd.

*In the unlikely event that any TDK audio cassette ever fails to perform due to a defect in materials or workmanship, simply return it to your local dealer or to TDK for a free replacement.

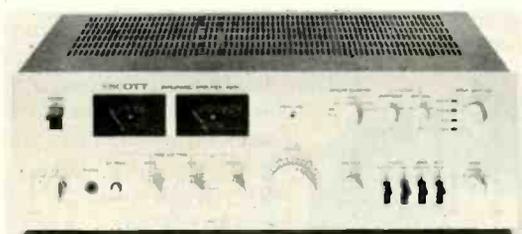


TDK®

The machine for your machine.®

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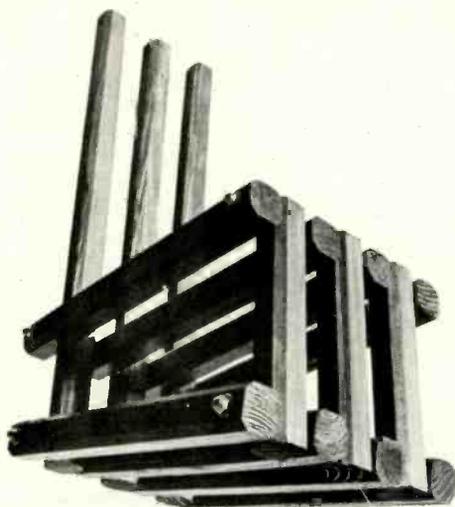
Equipment in the News



Scott's top integrated amp

The H. H. Scott Model 480A features two independent phono preamplifiers and permits recording from any function while you are listening to any other. The 480A also employs dual logarithmic power meters reading in watts and dBW for 8-ohm loads, subsonic and high filters, and capacitance and impedance selectors for the phono inputs. Rated power output is 85 watts (19¼ dBW) with 0.03% total harmonic distortion. The Model 480A is priced at \$449.95.

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Sound Levels raises the sound

Sound Levels from EL Manufacturing are speaker stands designed to reduce bass boom by elevating the woofer so that sound waves do not reflect off the floor. The stand also may be tilted (at either 7½ or 12½ degrees) so that sound is projected directly toward the listeners. With a back support that is 24 inches high, the Sound Levels are rated to hold weight in excess of 250 pounds and cost \$39.95 a pair.

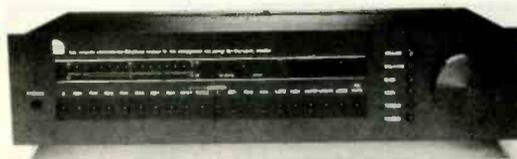
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Avid crafts a speaker for minimum diffraction

Avid's Model 330, top of its Minimum Diffraction line, is a three-way acoustic-suspension speaker system. Protective circuitry continually monitors input to each driver and shuts the system down in case of overload. Crossovers are at 500 Hz and 20 kHz. The recommended power range is 15 to 250 watts (11¾ to 24 dBW). Price of the M-330 speaker system is \$375; optional H/200 floor stands cost \$60 a pair.

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Computer controls Intersearch receiver

The Audio Pro TA-150 FM/AM receiver, built by 3D Gruppen in Sweden and available here from Intersearch, is fully computer-controlled: There are no moving parts inside the receiver. One control knob governs all adjustable functions; selector buttons determine the function served by it. Repair is accomplished by simply replacing a plug-in printed circuit card. The amplifier section is rated at 70 watts (18½ dBW) per channel with 0.1% total harmonic distortion. The price of the TA-150 is \$995.

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(more)

THE INSIDE STORY ON THE PERFECT COUPLES.

INTEGRATED AMPLIFIERS

AM-2800: Power output meters w/100 or 3 watt Scale Selector. Low and High/Low Loudness Control, High & Low Frequency Filters w/Alternate Levels, Audio Mute (-15 dB or -30 dB), Bass, Midrange and Treble Controls. 2 phono inputs, 2 tape inputs. **Power Bandwidth (IHF):** 7 Hz to 40 kHz/8 ohms. **Residual Noise:** less than 0.5 mV at 8 ohms.

AM-2600: Power output meters w/80 or 3 watt Scale Selector. Low and High/Low Loudness Controls, High & Low Frequency Filters w/Alternate Levels, Audio Mute (-15 dB or -30 dB), 2 tape inputs, 2 phono inputs. **Power Bandwidth (IHF):** 7 Hz to 40 kHz/8 ohms. **Residual Noise:** less than 0.5 mV at 8 ohms.

AM-2400: Bass and Treble Controls w/Two Step Turnover Controls, Audio Mute Control, High & Low Frequency Filters, 2 tape inputs. **Power Bandwidth (IHF):** 7 Hz to 40 kHz/8 ohms. **Residual Noise:** less than 0.5 mV at 8 ohms.

AM-2200: 20 watts per Channel Continuous Output Power, min. RMS at 8 ohms from 20-20,000 Hz with no more than 0.5% T.H.D. High & Low Filters, Loudness Control, 2 tape inputs, detent volume control and tape monitor. **Power Bandwidth (IHF):** 10 Hz to 45 kHz/8 ohms. **Residual Noise:** less than 0.8 mV at 8 ohms.

All Units: S/N (IHF): Phono—better than 75 dB, Aux—better than 95 dB.

STEREO AM/FM TUNERS

AT-2600: PLL MPX Circuitry, High Blend Switch, Signal Strength/Deviation and FM Tuning Meters, Output Level Control and Automatic Frequency Controls, Variable FM Muting. **Sensitivity (IHF):** 1.7 μ V; **Capture Ratio:** 1.0 dB; **Stereo Separation:** more than 45 dB (1 kHz).

AT-2400: PLL MPX Circuitry, FM Mute Switch, High Blend Switch, Separate Signal Strength and Tuning Meters, Output Level Control and Automatic Frequency Controls. **Sensitivity (IHF):** 1.8 μ V; **Capture Ratio:** 1.0 dB; **Stereo Separation:** more than 42 dB (1 kHz).

AT-2200: PLL, FM Mute Switch, Separate Signal Strength and Tuning Meters, Output Level Control. **Sensitivity (IHF):** 1.9 μ V; **Capture Ratio:** 1.3 dB; **Stereo Separation:** more than 40 dB (1 kHz).



AKAI INTRODUCES THE PERFECT COUPLES.

Choosing a tuner and integrated amplifier is a lot like choosing a mate. You look for things like compatibility, performance, appearance and, of course, fidelity.

Now AKAI makes matching component separates foolproof with a whole new line of amps and tuners. Paired on the grounds of total compatibility. And priced to be affordable.

Take the AT-2600 and the big AM-2800 amp, with a solid 80 watts, RMS per channel, 8 ohms, 20-20,000 Hz at .08% Total Harmonic Distortion.

Or the AM-2600 amp at 60 watts, RMS per channel, 8 ohms, 20-20,000 Hz at .1% Total Harmonic Distortion. And

pair it with the AT-2600 tuner.

Or the AM-2400 amp at 40 watts, RMS per channel, 8 ohms, 20-20,000 Hz at .15% Total Harmonic Distortion. And the AT-2400 tuner.

No matter which perfect AKAI couple you choose, you get specs and features not found on all-in-one receivers in the same price category. Improvements you can hear.

Hear them today at your AKAI dealer. And live in perfect harmony.

AKAI



ART COLLECTORS:

For an 18" x 24" reproduction of this Charles Bragg etching suitable for framing, send \$2 to AKAI, Dept. HF, P.O. Box 6010, Compton, CA 90224, ATTN: Couples.



Six-into-one keyboard mixer

If you're a keyboard player with a Moog, an Arp, a Rhodes, a Clavinet, a Stringer, a Wurlitzer, and sixty fingers, the System 6 keyboard mixer from MR Engineering is right up your alley. All your electronic keyboards can plug right into the System 6 and connect as one output to the stage amp of a PA system. Each input has its own level control, so you can mix your arsenal even before it gets to the soundman. System 6, which costs \$170, also includes clasp for attaching it to strap-type handles.

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Direct-drive turntable from Kenwood

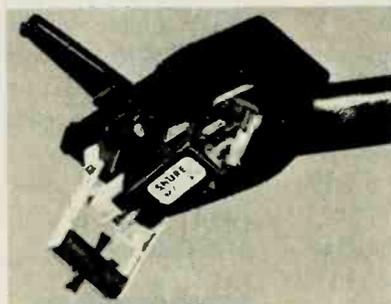
At the top of Kenwood's turntable line is the KD-750 with quartz phase-locked-loop speed control and direct drive. According to Kenwood, wow and flutter rating is 0.02%. The DC motor of the KD-750 is said to bring the platter to full speed in less than one revolution. The tone arm, designed for this turntable, has a dual bearing system to reduce pivot friction and a magnesium alloy headshell. The KD-750 also features an electronic braking system and microswitch controls. It costs \$495.



Eumig's first cassette deck

Eumig, an Austrian company best known in this country for its sophisticated Super-8 movie cameras, has introduced the Metropolitan CCD cassette deck. The top-loading deck has three heads and operates with an opto-electronic servo drive system. The CCD also employs a mixing circuit; front-panel sliders can blend mike/line or line/line or adjust reverb signals. Frequency response is rated ± 3 dB, 20 Hz to 20 kHz, and signal-to-noise ratio 72 dB with ferrichrome tape. The Metropolitan CCD costs \$1,300 with a remote-control accessory.

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Decca's three-in-one cleaning system

The Decca Microbe, distributed by Rocelco, is a record/stylus cleaner that employs three carbon-fiber brushes. One brush protects stylus and record between playings, another sweeps the record grooves during play, the third makes contact with the stylus tip when the arm is raised, removing any static charge and any dust that may have accumulated. The Decca Microbe, which costs \$9.95, is mounted on a bracket between the cartridge and headshell and is said to fit most cartridges.

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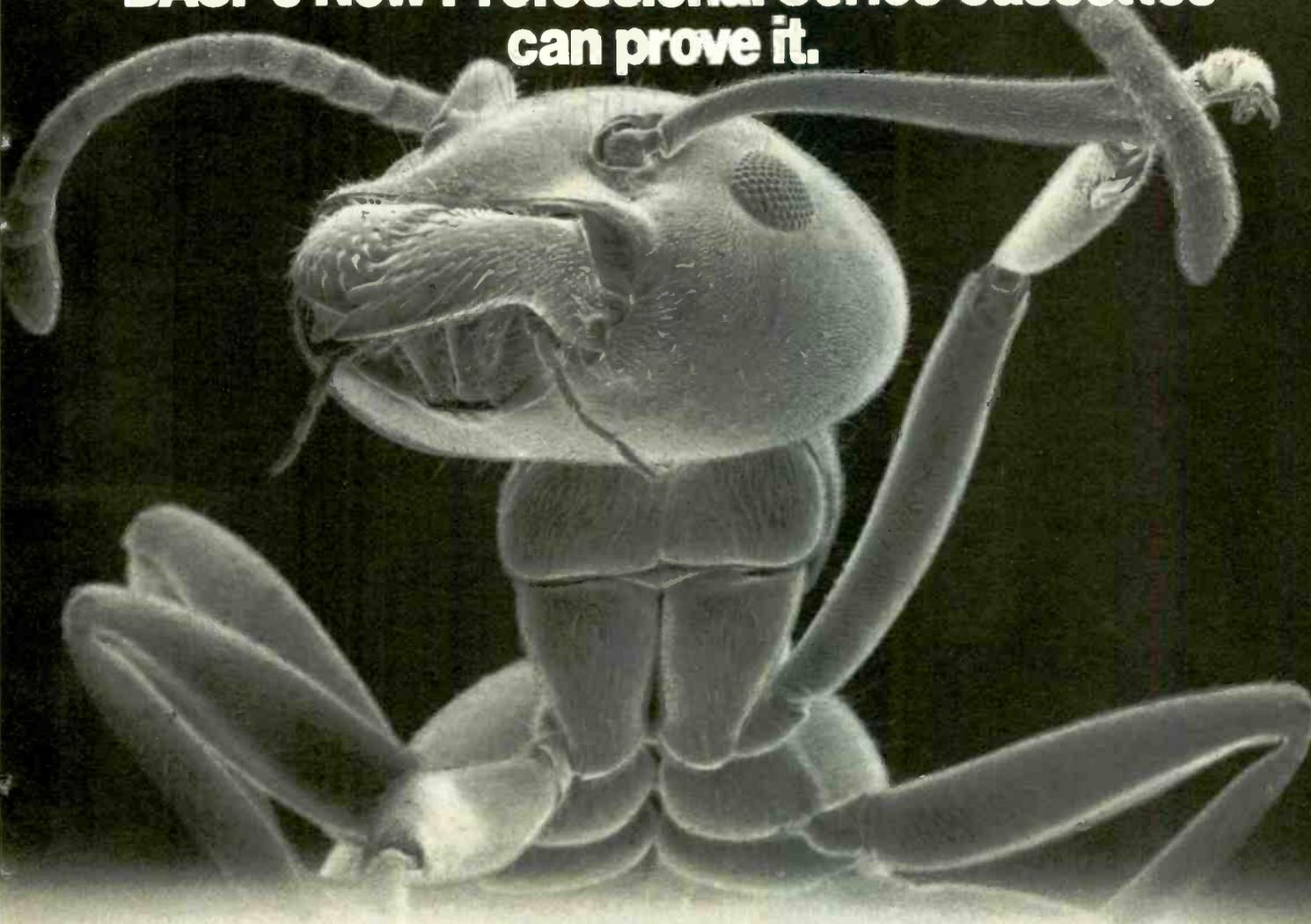
TV/tape/radio combo from Sharp

Sharp Electronics has combined a black-and-white television set with an FM/AM radio and a cassette deck in its 3T59. The TV section, which has a 4-inch (diagonal) smoke-tinted screen, comes with an earphone. The cassette deck has a built-in condenser mike, mixing capability, and full automatic stop, and the radio portion offers automatic frequency control. There are separate AM and FM/TV antennas. The 3T59 comes with a cigarette-lighter power adapter cord and costs \$279.95.

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(more)

An ant in trouble screams for help. BASF's New Professional Series Cassettes can prove it.



Sensitive Sound.

Using an anechoic chamber, the finest sound equipment available, and the most sensitive tape ever made, we were able to record the sound of a desert ant in distress ... a call that sounds amazingly like a fire alarm.

More sensitivity for more music.

It is a startling demonstration of the sensitivity of our New Professional Series Cassettes. You get more headroom, greater dynamic range, a better signal-to-noise ratio and unheard of sensitivity. And that's why you hear music the way you have never heard it before on cassette.

Sounds of other worlds.

Visit your BASF dealer soon and ask him about the New Professional Series, including Professional I, our new ferric formulation, Professional II, our new second generation chrome formulation, and Professional III, our new ferrichrome formulation that is ideal for auto cassette players.

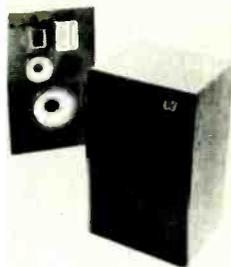
If you would like to discover the sounds of an ant in distress, an eye winking, a butterfly in flight, and other never-before-recorded sounds, send \$3.50 to BASF OTHER WORLDS, Box 18367, Boston, Mass. 02118.

We will send you a \$4.99 Professional II C-90 cassette with these sounds. This offer will be available while supplies last. Please allow 4 weeks for delivery.



 **BASF**

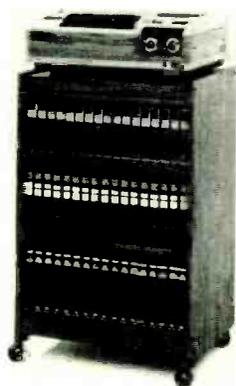
Sensitive Sound. From The People Who Invented Magnetic Tape.



Wharfedale adds speaker to line

The Teesdale speaker system, at the low end of Wharfedale's line, incorporates design details and the tweeter system of more expensive models. Computer optimization and laser holography techniques are said to have been used in its design. Frequency response is rated at ± 3 dB, 40 Hz to 26 kHz, and the efficiency rating is 87 dB SPL for 1 watt at 1 meter. The Teesdale costs \$270 in a walnut-veneer cabinet.

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A cabinet for VCRs

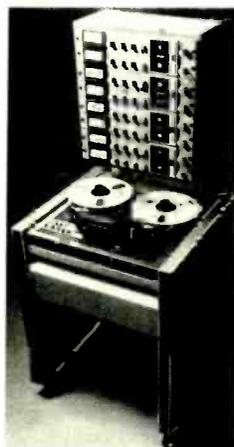
The newest product in GUSDORF's furniture line for home-entertainment electronics is the Model 2450. Especially created for video cassette recorders, the 2450 is designed to hold the recorder itself and more than 100 tapes, which are stored two-deep on three shelves. The cabinet, which is finished in simulated walnut, stands 32 inches high and 19½ inches wide. The Model 2450, costing \$54, is fitted with casters.

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An automatic graphic equalizer

Designed both to control feedback and to optimize listening, the ADI-1500 offers octave-band equalization from 31.5 Hz to 16 kHz and contains a built-in pink-noise generator. An optional calibration microphone and two rows of red and green LEDs detect either deficiency or overabundance of signal in each of the eight octaves. By moving the sliders for each until both red and green LEDs light, the user can adjust for "flat" frequency response. Response of the ADI-1500 itself is rated $\pm 1/2$ dB from 25 Hz to 22 kHz, distortion at less than 0.05% at 0 dBm, and the range of the equalizers at ± 12 dB. The ADI-1500, 19 inches wide, is suitable for rack-mounting and costs \$795.



Otari goes 8-track

Otari Corporation has introduced a one-inch 8-channel recorder with all the features of previous professional models. Along with sync capability, the Model MX-7800 offers capstan speeds of 15 and 30 ips, easy access to electronics for aligning the machine, click-free punching in, and a built-in 700-Hz and 15-kHz oscillator. An optional remote-control panel includes speed tuning to match pitch or create special effects and an LED tape timer with reset button and memory. Suggested price is \$8,695, including the floor console.



Wireworks has line of mike cables

Suitable for indoor or outdoor work—stage, public address, recording studios, or anywhere you need a microphone—Wireworks' cables are available in three jacket coatings: black rubber for flexibility, black neoprene for outdoor or heavy-duty work, and polyvinyl chloride in twelve colors so that a recording studio might, for instance, color-code according to the particular studio in which the cables are used. Wireworks uses Switchcraft connectors but will supply custom models. Prices range from \$10 for 5 feet of rubber-jacketed cable to \$90 for 100 feet with the neoprene jacket.

CIRCLE 146 ON PAGE 141

The evolution of the revolution.

The new Bose® 901® Series IV Direct/Reflecting® speaker.

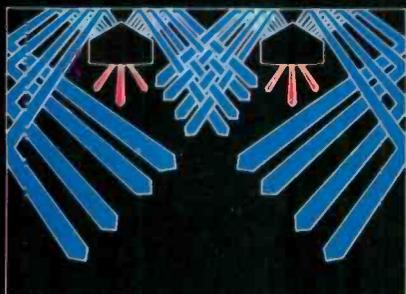
When Bose introduced the original 901® speaker, high-fidelity critics around the world hailed its revolutionary approach to sound reproduction.

"Bose has, in a single giant step, produced one of the finest speaker systems ever made."
(USA)

"The orchestra is there in front and the atmosphere of the concert hall all around."
(Belgium)

"Bose contains more technical innovations than any other speaker of the past 20 years."
(Austria)

"...sets new standards for loud-speaker music reproduction."
(France)



Now the 901® has evolved. Again. Introducing the Bose 901 Series IV Direct/Reflecting® speaker system. With new equalizer controls that consider your room as part of the speaker design. And a new answer to the problem of choosing an amplifier.

It is a known fact that moving a speaker just a few feet in a room will alter its performance. And that the variances in a speaker's performance from one living room to the next can be vast. This is a problem all speakers have regardless of design. Except one.

A new approach to the study of listening room acoustics and an ambitious survey of many actual listening rooms has resulted in new equalizer controls for the Bose 901 IV. These controls allow you to simultaneously adjust several bands of frequencies in a precise manner to match the per-

formance of the 901 IV to your room. In a way that cannot be duplicated even with an expensive graphic equalizer.

As a result, the 901 Series IV speakers perform as well in the living room as in the demonstration room.

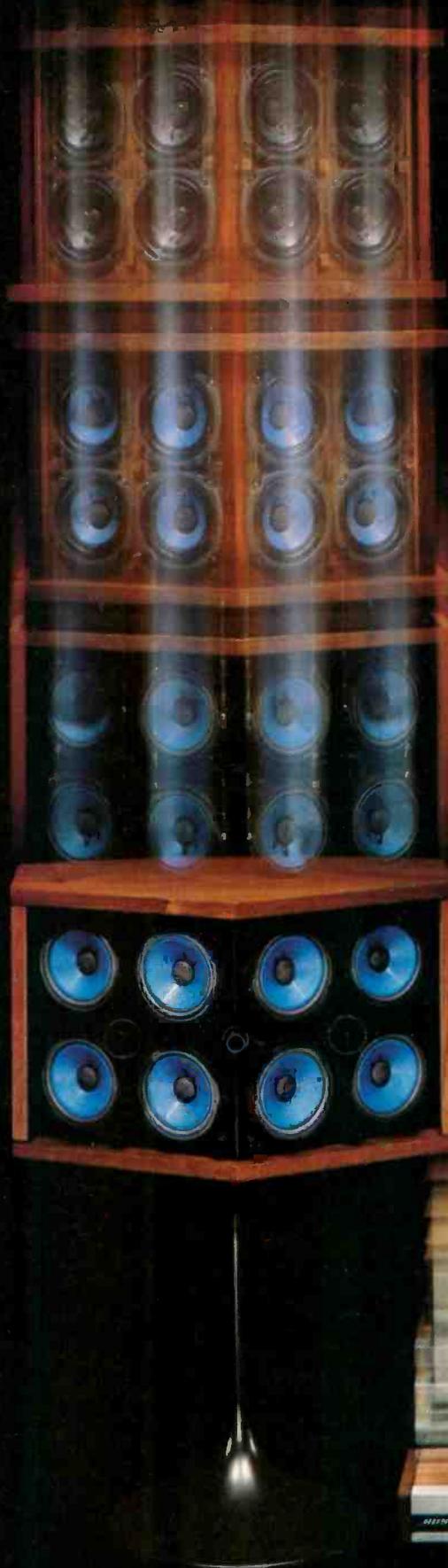
Were our engineers to design a speaker specifically for your living room, you would not get better sound than you do when you properly adjust the equalizer controls on the Bose 901 Series IV.

And the 901 IV provides a simple answer to the problem of choosing the power rating of your amplifier or receiver. Choose any amplifier you wish. The 901 IV provides surprisingly loud sound with as little as 10 watts per channel. Yet it is durable enough for us to remove all power limitations on the 901 IV. There is no power limit. Period.*

With these new improvements, the Bose 901 IV gives you a flexibility no other speaker can. You can place the 901 IV in almost any room and get the like-like, spacious sound for which the 901 IV

Direct/Reflecting® speaker is famous. And you can match it to virtually any amplifier.

We think that once you hear the new Bose 901 IV Direct/Reflecting® speaker, you'll agree. The revolution has evolved.



*There is a power limit in commercial applications. For information, contact Bose Customer Service.

BOSE®

**While others are reaching
for this technology,
Sony brings it within
your reach.**



It takes a sharpened sense of technology to deliver innovation at sensible prices.

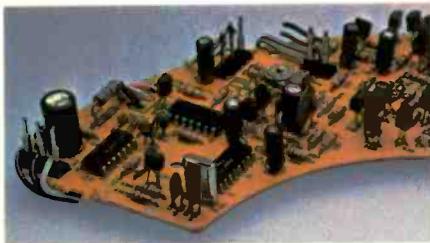
Who else but Sony could manage it? We know turntables backwards and forwards. Even as far back as 1966, we were surprising people with our developments: that one, the application of a slow-speed, servo-controlled motor to turntables.

Today, we present the PS-X7, X6 and X5. Three fully automatic, direct drive turntables that are a direct challenge to the competition.

And the competition will soon find that we've got the features they don't want to face.

**The X-tal Lock.
X-act speed accuracy.**

Good as it is, a traditional servo system has two flaws. When playing a record for a long time, it heats up and you're continually forced to correct for speed drift.



More critically, increased friction between the stylus and record during loud passages can slow down the speed. It will then fall into a range wherein a conventional servo isn't sensitive enough to read. But your ear can.

Sony's X-tal Lock system cannot be accused of any of the above. Its quartz generator serves to regulate the servo. The speed is electronically locked in. Impervious to changes in temperature, load, or voltage.

Quartz can help Bach. Quartz can help rock.

Our brushless and slot-less is matchless.

Sony's new motor gives brushes the brush. The ring shaped permanent magnet rotor and fixed coil windings eliminate cogging.



The torque is high—and that's not just talk.

Its rotation is smooth, and start-up, quick.



PS-X5

PS-X6

**Sony's Speed
Monitoring System.
Like millions
of tiny State Troopers.**

The X-tal Lock system is worth x-actly nothing, unless the right information is relayed to it. Our system uses a precise magnetic pulse signal, recorded on the outer rim of the platter. An 8-pole magnetic pick-up head receives it. Then transmits it to the servo electronics.



Most systems base their information on only one pole. By using 8—and averaging them—we get above average accuracy.

**Want functional
controls?**

The case is closed!

Sony believes a dust cover should live down to its name—it should stay closed, protecting record and turntable from dirt. You have immediate access to the controls without lifting the cover. (On the X7 and X6, the controls are touch sensitive.)

There's a lot more built into these machines; a lot more reasons to look into them.

A safety clutch mechanism protects the tone arm against damage, should you grab it while in motion.

And on the X7 and X6, an optical sensing system is included. It automatically returns the arm at record's end. (In the X7, a carbon fiber tone arm.)



What's more, these turntables are worth more dead, than alive. Because their cabinets are made from an acoustically dead material. That way, acoustic feedback caused by the speakers can't come back and make the cabinet vibrate.

Vibration is also cut by our thick rubber mat, and heavy aluminum platter. Viscous filled rubber feet give vibration the boot as well; the same viscous material fills the rubber mat on the PS-X7.

All this, so while you're vibrating to the record, your turntable isn't.

Much has been engineered into these turntables that we haven't mentioned, including lightweight tone arms with a cast aluminum alloy headshell.

So tightly built are they that we didn't even have room for one more thing: bigger prices.

Cartridges are not included

SONY

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CIRCLE 50 ON PAGE 141

A short course in shelf-improvement.

Hand-rubbed oiled oak and walnut wood finishes add a richness to your room.

Die-cast or injection molded frames on all drivers for a solid, tight sound.

Special controls let you equalize the speaker to your room's acoustics.

Molded port tubes enable more exacting quality control of the tuned enclosure, ensuring total speaker-to-speaker duplication of the lab standard.

Deep, long-throw woofer features high-technology, sintered ceramic magnet structure.



The quickest way to improve your shelf is with the new Series II from Altec Lansing. Each speaker in the Series II line combines the best of everything we've learned during the past 40 years of making professional speakers for studios, concerts and theaters.

As you can see, we've given the Series II a lot of features you'd expect only in Altec's most expensive speakers. Items like long-travel woofers with non-degaussing ceramic magnets; equalizing controls; molded port tubes; and real wood finishes.



What you can't see (but you can most assuredly hear) is the Series II's high-efficiency design delivering the fullest sound possible, even with a receiver or amp as small as 10 watts. Also, there's the confidence you'll have in knowing that we make every major component and cabinet ourselves. Then we back it all up with a full, 5-year warranty.

For the full course, send for our free, full-line catalog and the name of your nearest Altec Lansing dealer. Write: Altec Lansing International, 1515 S. Manchester Ave., Anaheim, CA 92803.



Altec Lansing. The #1 name in professional speakers is coming home.

Aspen Tapes Itself

The world-renowned music festival establishes a recording institute

by Sedgwick Clark



SINCE ITS INCEPTION in 1949, Colorado's Aspen Music Festival has attracted some of the world's finest musicians, yet the performances in past seasons have not been preserved on professional-quality recordings. That oversight was corrected this year with the founding of the Audio-Recording Institute: Students recorded the concerts using equipment contributed by audio manufacturers under the tutelage of professionals in various aspects of the recording industry.

For Harold Boxer, music director of the Voice of America and initiator of the Audio-Recording Institute, the course was imperative. Traveling throughout the country for the VOA to record every type of music from rock to grand opera, he had found few engineers adequately equipped to record a symphony concert.

Aspen seemed the perfect training ground. "I don't know any other place in the United States," he says, "that offers the wide variety of live music-making and combinations of instruments to a person who wishes to study recording, learn how to mix and balance, learn all about microphones and how an orchestra is supposed to sound."

In previous years the Music Festival's treasurer, Edgar Stanton, had made recordings with two Neumann U-87 mikes and an Ampex 600 portable mono tape deck. In 1977 stereo recordings were made, but with non-professional equipment and a two-mike pickup that did not capture the back of the orchestra. No investment in adequate gear had been made, says Stanton, because "we just didn't have the money." Performers had been urging the administration to provide the

means for better recordings for years, however, and Aspen Dean Gordon Hardy was receptive when Boxer approached him about the Institute.

Boxer's next step was to ask manufacturers for loans of equipment. From Ampex, he secured four half-track, quarter-inch tape decks—three ATR-102s and an ATR-702 portable for "run-out" or "on-location" work. From Mic Mix came three Master Room reverb chambers. Mixers were borrowed from SSI (the eight-channel stereo model) and Ampex (two AM-10s). Monitoring gear included four JBL 4311 speakers, a JBL 6223 power amp, and a Harman Kardon Citation 11 preamp. Several mikes were available in pairs—Neumann U-87s, KM-86i's and 84i's, and Electro-Voice RE-15s and 10s—along with single AKG 160E and Neumann SM-2 stereo mikes. Total worth: roughly \$55,000.

The course—open to anyone regardless of background—had been filled soon after its announcement, the students enrolling for varied reasons. The manager of the Fort Wayne Philharmonic wanted information to apply to the orchestra's live broadcasts. A pianist studying at Juilliard wanted to learn his way around a studio. Others had recorded in studios but sought the opportunity to work in an active concert situation.

As the two-week sessions (four in all) began on June 26, Boxer and his instructors found that the students' divergent needs and backgrounds required different approaches. Those in the first and third sessions had little musical or technical training. The second one (which I sat in on) was another matter: Half of the class was technical in orientation and half had

musical backgrounds—providing a natural division for study and for allocation of recording assignments. As it turned out, the technical/musical division also separated the rock buffs from the classical.

"The groups are like night and day," commented chief instructor Alan Kefauver early in the course. "The people in one are all technicians from radio or television stations. They know every spec and piece of equipment on the market. But I can't get through to them that the music is the important thing, not the technique."

The thirty-one-year-old Kefauver is director of recording at the Peabody Conservatory of Music in Baltimore. A French-horn player with four music degrees, he spelled out his conservative stance on the first day: "Classical recording just doesn't work with big sixteen-track units. Never use two mikes where one will do the job." Most of the technical wizards, with their "fix it in the mix" rock-recording philosophy, were skeptical. Some couldn't resist flaunting their engineering skills, arguing with Kefauver over the number of mikes to be strung. One even suggested panning the bass fiddles to the middle of the orchestra for a centered bass sound in the mix.

The other students, well acquainted with orchestral and chamber music, primarily sought to capture the sound as naturally as possible. Some took a more active interest, following the score during the performance and altering balances for certain sections. (This was against Kefauver's advice—he felt that scores only distract from the producer's responsibility for setting levels and balances for a live concert and leaving the rest to the performers.)

Boxer, Thomas Frost of Columbia Masterworks, and John Pfeiffer of RCA Red Seal had been billed as "faculty" in the promotional material. Pfeiffer was unable to appear, Boxer was in his Washington VOA office for the first week of the session I attended, and Frost (who was writing a paper for the Institute on the aesthetics, business, and future of recording and how the medium has affected society) only briefly introduced the course and spoke on one afternoon. Yet only a couple of the students felt shortchanged.

Apart from the daily recording of concerts, the class heard several experts in the field. In the electronic music workshop, Steve Horlich, an electronic music composer, introduced the fascinated students to a pair of Buchla synthesizers.

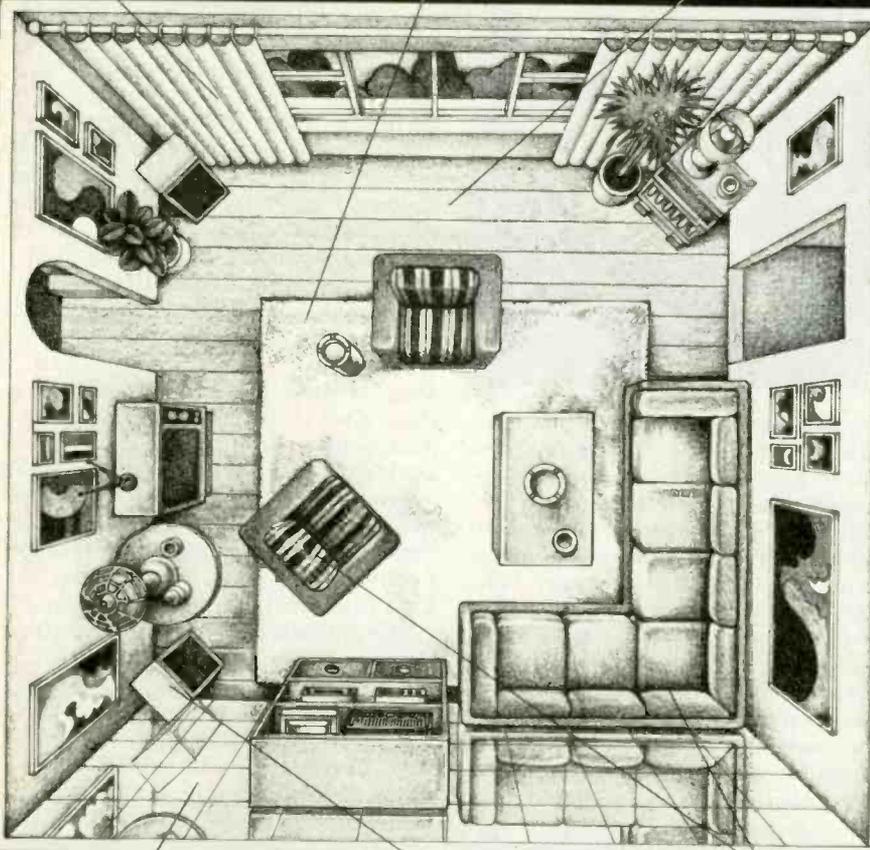
Most of the lecturers confined themselves to the technology of recording,

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but Andrew Raeburn, a&r director for New World Records, presented a thorough description of what a producer does, from a&r to the pressings stage.

Aspen music director Jorge Mester articulated the pure-musician's viewpoint. To student queries about the technical aspects of his recordings with the Louisville Orchestra, he repeatedly answered, "I don't care." He completely trusts his producer, Andrew Kazdin, he said, and doesn't think about technical details as long as the result sounds good. "The right tempo" is his only concern. Mester also feels that recordings have not affected performance practice—a conviction Frost disagreed with when he spoke two days later. Their major effect, Frost said, was that performers today are much less willing to take chances in front of audiences used to note-perfect studio recordings.

An esprit de corps had developed in the class by the time a staged concert version of Mozart's *Idomeneo* was done. The students had gone through dress rehearsals with the singers and stage crew and felt part of the production. One was so enthusiastic that after the performance, on his way out to the stage to break down the mikes, he vigorously pounded the shoulders of a rather disconcerted Mester—as if the conductor had just completed a forty-yard end run.

Control-room antics weren't unanimously appreciated, however. One of the more serious musical students complained about the "schlocky attitude" and commented: "We heard Tom Frost lecture about how important it is to be prepared, and I couldn't help wondering if he eats pizza and drinks beer during sessions too." Even though the students realized that Boxer and Kefauver were responsible for ensuring high-quality records, they would have preferred discovering for themselves what sounded best. One of them suggested that a congenial soloist or quartet might have allowed them to set up and adjust mikes during a rehearsal.

It is unarguable that the Institute was successful. Next year Boxer hopes to enlarge the staff and add to the equipment. He also hopes to hold the classes down to ten students each, which would likely require a rise in the \$200 tuition.

One student (probably the most industrious) summed up the experience well: "People have a romantic view of recording. Being able to work with live concerts with this intensity, you find out that there's so much involved in every concert—even a small chamber group—and you learn not to waste professional musicians' time."

FOR ANYONE WHO CAN AFFORD PERFECTION THIS IS THE PERFECT SPEAKER. THE NEW AR9.



The search for perfection never ends. Maybe next year we'll be able to build something even more to your liking than the AR9.

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But right now, by present standards, there simply isn't anything that looks better on paper or sounds better at home than an AR9.

The AR9 is a 4-way floor standing speaker, which incorporates a kind of electronic automatic transmission to improve bass response. From bass notes below the audible range, to over 20,000 Hz, its frequency response curve looks flat as a Kansas wheatfield.

Compare it with bigger speakers that cost even more and you'll be stunned at the difference you hear.

The AR9 is capable of painful sound pressure levels. You can pump 400 watts per channel through it (with the usual cautions — driven to clipping 10% of the time; normal source material).



Truth In Listening

But most of all, the sound of it is simply staggering. Beyond description really, with beautiful dispersion and precise stereo imagery. Words and notes emerge from your own records you may never have heard before.

At about \$750 each, the AR9 is an expensive speaker.

But, if you can afford perfection, it's the bargain of the century.

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HiFi-Croctic No. 40 (Schubert)

by William Petersen

H	1	J	2	R	3		F	4	A	5	Y	6	O	7	V	8		R	9	O	10	H	11	U	12	S	13	A	14			
	V	15	J	16	T	17		E	18	N	19	A	20	Z	21	M	22	C	23		P	24	X	25			F	26				
A	27	E	28	G	29	O	30	X	31		H	32	ZZ	33	U	34	N	35		F	36	J	37	T	38	K	39	X	40			
	F	41	O	42	L	43		N	44	D	45	ZZ	46	J	47	A	48	H	49	V	50	R	51	X	52	G	53					
X	54	Z	55	N	56	S	57		A	58	R	59	X	60	M	61	U	62	H	63	O	64	C	65	J	66	V	67				
O	68	E	69		D	70	P	71		K	72	A	73	O	74	Y	75	T	76		W	77	V	78			G	79				
X	80	ZZ	81	C	82	R	83		L	84	O	85		N	86	X	87	A	88	E	89	J	90	H	91	V	92	O	93			
Z	94		Y	95	I	96	U	97	A	98	X	99	S	100	H	101	B	102		G	103	Q	104	N	105	F	106	V	107			
A	108	C	109	P	110		E	111	S	112		Z	113	N	114	D	115		C	116	J	117			O	118						
ZZ	119	T	120	V	121	A	122	X	123	L	124		X	125	M	126	I	127	P	128		H	129	U	130	M	131	K	132			
S	133	O	134		G	135	N	136	E	137		A	138	B	139	I	140		L	141	X	142	J	143	A	144	F	145				
T	146	W	147	D	148	H	149	B	150	N	151	A	152	R	153	U	154		M	155	J	156	W	157	O	158			K	159		
V	160	ZZ	161		U	162	N	163	X	164	O	165	G	166	F	167	R	168	H	169	C	170		X	171	V	172	A	173			
U	174	N	175	T	176	W	177	E	178	R	179	M	180	O	181	L	182	N	183	J	184		K	185	W	186	X	187	C	188		
P	189	A	190	O	191	Q	192	W	193		F	194	D	195	J	196	E	197	X	198	A	199	N	200	R	201	I	202				

DIRECTIONS

To solve these puzzles—and they aren't as tough as they first seem—supply as many of the Output words as you can in the numbered dashes following the Input. Unless otherwise specified in the Input, the Output consists of one English word. "Comp." means compound, or hyphenated, word.

Transfer each letter to the square in the diagram that bears the corresponding number. After only a few correct guesses you should begin to see words and phrases emerging in the diagram, which when filled in will contain a quotation related to music, recordings, or audio.

The words in the quotation are separated by darkened squares and do not necessarily end at the end of a row.

Try to guess at these words and transfer each newly decoded letter back to its appropriate dash in the Output. This will supply you with further clues.

A final clue: The source of the quotation—the author and his work—will be spelled out by the first letters in Output, reading down.

The answer to HiFi-Croctic No. 40 will appear in next month's issue of HIGH FIDELITY.

INPUT

A. Quartet No. 14 (4 wds.)	14	98	58	144	138	20	199	173
		5	73	190	88	27	152	122
						48	108	
B. "Von _____" 1815 song to a Kosegarten text	139	102	150					
C. 1817 song to a Schiller text	109	82	23	170	116	188	65	
D. Piano quintet	115	195	148	45	70			
E. Poet of the first half of <i>Schwanengesang</i> cycle	18	89	28	137	69	178	197	111
F. "_____ jedem," 1819 hymn (3 Ger. wds.)	167	26	41	4	106	194	145	36
G. _____ Festival Ensemble, recorded Word D. on Turnabout	166	103	53	135	29	79		
H. German baritone, recorded <i>Winterreise</i> on Seraphim (full name)	91	129	169	49	1	11	32	63
							101	149
I. Bustle	96	127	202	140				
J. 1828 offertory for tenor and chorus (2 Lat. wds.)	37	117	90	66	143	184	196	156
						16	47	2
K. British poet of "Annot Lyle's Song"	185	39	132	72	159			
L. Karl _____ author of play <i>Franz Schubert</i>	141	124	43	182	84			
M. Composer to whom Schubert dedicated his last three piano sonatas	126	61	180	131	155	22		
N. 1815 song to a Goethe text (2 Ger. wds.)	200	114	44	35	19	151	56	183
				175	136	163	86	105

INPUT

O. Defeats utterly	191	64	68	134	85			
P. Mattiwilda _____, recorded Schubert on European labels	110	71	24	189	128			
Q. With Word S., two 1817 overtures (3 wds.)	74	93	192	10	30	165	104	181
				7	42	118	158	
R. English country dance in 2/4 time; Schubert wrote 66 for piano	83	59	51	9	201	168	179	3
								153
S. See Word O.	133	100	112	13	57			
T. German tenor, recorded Schubert songs on Lyricord	76	146	176	38	17	120		
U. 1822 song to a Goethe text (2 Ger. wds.)	34	162	97	130	12	154	62	174
V. Symphony No. 8	121	172	78	107	15	92	50	160
	S	C	O	P	E	S	8	67
W. Defendant in 1925 trial in Tennessee	177	186	77	147	157	193		
X. Full name of the D. in Schubert's thematic catalog	142	80	125	87	25	52	123	99
	187	31	40	171	198	164	60	
								54
Y. A vote against	75	95	6					
Z. Festive	94	113	21	55				
ZZ. Unrecorded German-Dutch concert specialist in Schubert songs	119	46	33	161	81			

Solution to last month's HiFi-Croctic appears on page 11.

**What TDK
did for your ears,
it now does
for your eyes.**



You know us best for our reputation in audio. In fact, it's audiophiles like you who have made TDK SA the best-selling High bias cassette in America today. But here's something you may not know: the same Super Avilyn engineering principle that revolutionized audio cassettes is in TDK's equally revolutionary new Super Avilyn video cassettes.

No wonder that TDK Super Avilyn is the first 4-hour capability video cassette to be quality approved by the people who know: video cassette recorder engineers. And even less wonder that Super Avilyn makes possible an image so stunning, you will feel as though you are sitting in the broadcast studio.

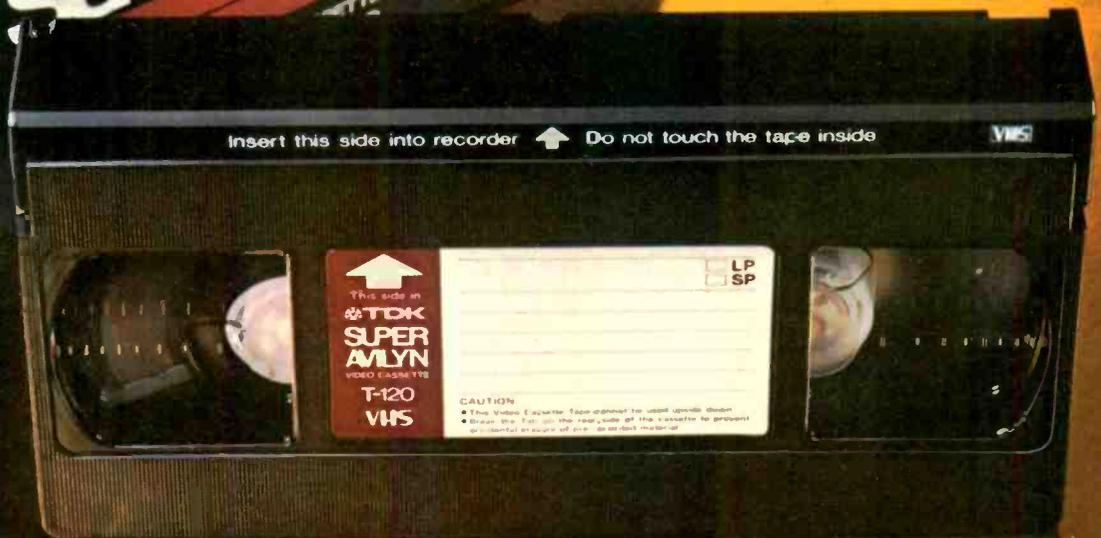
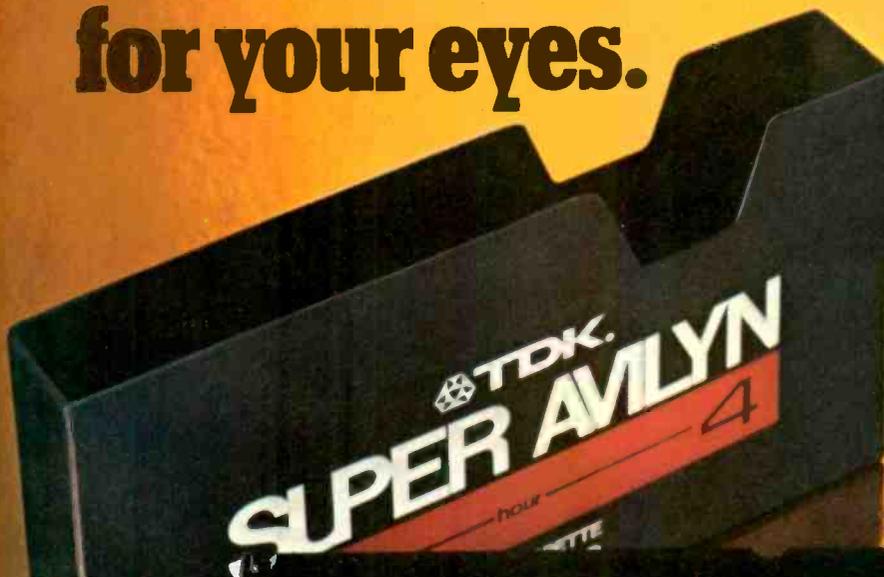
What's more, TDK's strict quality control works to give you low wear on delicate video heads, virtually non-existent oxide shedding, and no problems with tape stretching, even with repeated playback.

That's because TDK Super Avilyn video cassettes are an actual component of the system, not just an accessory. Our tape is housed in a precision, jam-resistant mechanism, for years of consistent high quality video reproduction. And TDK Super Avilyn VHS video cassettes are compatible with all VHS machines, both those with short-play (2-hour) capability and those with short and long-play (4-hour) options.

TDK Super Avilyn VHS video cassettes: model VA-T60, for one and two-hour recording; model VA-T120, for two and four hour recording. If you like things to look as good as you like them to sound, take a look.

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The Machine for your Machine.[®]



Introducing the act that follows a tough act to follow.



The new TEAC A-3440

The TEAC A-3340, the world's most popular Multitrack Deck, has just been upstaged. And it wasn't easy, considering the acceptance (and features) of the A-3340.

WE BEGAN BY SIMPLIFYING SWITCHING PROCEDURES DRASTICALLY.

Now, you can concentrate more on your music and less on the mechanics of recording.

Instead of the old Rec Mode, Sync and Monitor switches, there is now a simple Function Select feature. So instead of having to simultaneously activate many different switches on each track—TAPE/SOURCE, PLAYBACK/RECORD, and dbx® ENCODE/DECODE—all functions are now controlled by a single Function Select button.

NEXT, WE BUILT IN MORE MONITORING FLEXIBILITY.

A headphone mixer is an integral part of the A-3440. Plug in your headphones and you can listen to any or all four tracks, and get a mono mix. An independent level control means you can adjust the mix volume.

AND THEN, WE ADDED DBX CAPABILITY.

The A-3440 accepts an optional dbx unit, so you can add up to 30dB to the overall signal-to-noise ratio. (As mentioned, it's automatically tied to single Function Select button.)

FOR A FINAL TOUCH, THERE'S NOW A PITCH CONTROL.

The built-in pitch control gives you special effects by slowing down or speeding up the tape by 5%. It also means you can add instruments days or weeks after your initial recording, and tune the tape instead of tuning the piano.

AND, AS THEY SAY IN THE ADS, MUCH MUCH MORE.

Micro-Switch Transport Controls, with optional remote, highly stable DC servo-controlled capstan motor for an absolute minimum of wow and flutter, expanded-scale VU Meters, and all the time-proven and studio-tested features that came with the A-3340 are still yours on the A-3440.

So visit your nearest TEAC dealer and catch the newest act from TEAC.

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First. Because they last.

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The sound processors from TEAC. They take your act way beyond the limits of "live."



GE-20 Equalizer



MB-20 Meter Bridge



Model 2A Mixer

Live music recorded directly onto tape has its limits.

Limits of instruments, limits of the recording environment, limits of time.

With the Sound Processors from TEAC, music becomes like sculptor's clay. It can be molded and shaped, made perfect according to your own special inner vision, made perfect through experimentation, made perfect at your convenience.

The Sound Processors let you equalize, mix, monitor, control. You can alter, refine and improve your music until the idea and the reality are the same.

EQUALIZE

TEAC's GE-20 Equalizer was designed for recordists, not the audiophile. Each channel has an input level control and input overload LED to guard against distortion. Two output level controls, plus a switchable output level meter, lets you monitor the signal from each channel.

While some other equalizers use wound coils, the GE-20 uses operational amplifier synthesized inductors which eliminate externally induced hum and noise no matter what EQ settings you use.

The two channels of the GE-20 are totally independent of each other and can be bypassed individually. You get ten bands of EQ per channel, one octave per band. Level controls can be set from +10 to -10dB.

As compact as it is versatile, the GE-20 can stand alone or be rack mounted.

MIX

The TEAC Model 2A Mixer gives you control of volume, tone, blend and spatial positioning of instruments. It handles six mic or line inputs and drives four outputs.

The Model 2A Mixer is an improved version of the famous Model 2. Separate bass and treble controls have replaced hi and lo-cut filters and each channel has an independent pan control. The Model 2A also includes a master fader control, plus four Accessory Send/Receive, and four Buss-in jacks.

MONITOR

The TEAC MB-20 Meter Bridge gives monitoring flexibility to any multitrack setup, but it's ideally suited to

the Model 2A Mixer. It meters up to four line level signals and has a built-in 4 x 2 monitor mixer, plus buss/tape selectors for each channel.

CONTROL

The Sound Processors from TEAC let you participate fully in the making of your music. All the choices, all the decisions are yours. You're in control.

These Sound Processors were created by TEAC based on the experience we've gained in creating and building on the whole idea of home multitrack recording. More Sound Processors and other multitrack equipment are on the way.

The Sound Processors from TEAC. They're at your TEAC dealer now.

TEAC®

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Montebello, CA 90640

CIRCLE 62 ON PAGE 141



Here's another Empire 698 Turntable dashing off the assembly line.

It takes 15½ hours to make an Empire turntable.

Each one stands over 80 separate inspections before it reaches the end of the line.

And after the assembly is done, we test it some more.

Wow and flutter, rumble, and speed accuracy are electronically confirmed to meet specifications before final approval.

It's not a fast way to finish a turntable, but it's a great way to start one.

EMPIRE

Empire Scientific Corp., Garden City, New York 11530

CIRCLE 23 ON PAGE 141

A CONSUMER'S GUIDE

New Equipment Reports

Preparation supervised by
Robert Long, Harold A. Rodgers,
and Edward J. Foster
Laboratory data (unless otherwise noted)
supplied by CBS Technology Center



A Worthy Automatic by Dual

Dual Model CS-621 single-play-plus-repeat automatic turntable ensemble. Dimensions: 16¾ by 14½ inches (base), 6 inches high with cover closed; 9½ inches additional clearance at top and 2 inches at back needed with cover open; approx. 3½-foot audio cable. Price: \$300. Warranty: "limited," two years parts and labor. Manufacturer: Dual, West Germany; U.S. distributor: United Audio Products, 120 S. Columbus Ave., Mount Vernon, N.Y. 10553.

Dual's CS-621 is a fully automatic (though still nonchanger) version of its popular semiautomatic 604. Its tone arm has Dual's four-point gimbal mount and tuned antiresonance counterweight. A speed-regulated DC motor powers the direct drive. The turntable will play a single disc either once or repetitively.

The 621 offers two speeds and a pitch control that provides a total range from approximately a semitone sharp to a little less than a semitone flat at each speed. When speed is precise at 33 rpm, it requires some readjustment at 45, but the strobe makes that very easy. And more important, the speed is unaffected by the voltage over the test range. Weighted peak flutter is excellent; ARLL-weighted rumble is very good.

The straight tubular arm with offset headshell is in Dual's most recent tradition. Its four-pivot bearings are essentially

frictionless, and auto trip requires negligible force. A long coil spring mounted directly at the pivot provides tracking force. The gauge, calibrated in 1/10-gram increments to 1½ grams and then in ¼-gram increments to 3 grams, is dead accurate at all the ½-gram points checked in the lab. Antiskating force is set separately for spherical, elliptical, and "CD-4" styli, with a linear relationship between the scale markings and the actual forces involved in each case.

When fitted with a Shure V-15 Type III cartridge, the tone arm resonates at frequencies below the ideal range, but the resonances are very well damped. (One of the two mechanical filters in the counterweight is tuned to damp motions induced

REPORT POLICY Equipment reports are based on laboratory measurements and controlled listening tests. Unless otherwise noted, test data and measurements are obtained by CBS Technology Center, Stamford, Connecticut, a division of Columbia Broadcasting System, Inc., one of the nation's leading research organizations. The choice of equipment to be tested rests with the editors of HIGH FIDELITY. Samples normally are supplied on loan from the manufacturer. Manufacturers are not permitted to read reports in advance of publication, and no report, or portion thereof, may be reproduced for any purpose or in any form without written permission of the publisher. All reports should be construed as applying to the specific samples tested; neither HIGH FIDELITY nor CBS Technology Center assumes responsibility for product performance or quality.

Dual CS-621 Automated Turntable

Speed accuracy	no measurable error for either speed at 105 or 127 VAC when set exact at 120 VAC
Speed control range	
at 33	-4.8 to +6.0%
at 45	-4.1 to +5.9%
Weighted peak flutter (ANSI)	
average	0.04%
maximum	0.07%
Total audible rumble (ARLL)	-63 dB
Stylus force gauge accuracy	no measurable error
Arm friction	negligible
Stylus force required for automatic trip	0.18 gram
Tone-arm resonance & damping (with Shure V-15 Type III)	5 Hz lateral, 6½ Hz vertical; 1¼ dB rise

by record warps; the other is tuned to absorb energy in the range of the suspension resonance.) A pickup with a lower compliance than the Shure's (which is very high) will, of course, raise what arm resonance remains away from the warp-frequency range.

Assembling the CS-621 for operation is done simply by loosening three transit screws and slipping the dust cover into slots in two spring-loaded hinges. The cover will remain in any position from closed to fully open, and the spring tension adjusts via knurled knobs. As with Dual tone arms in general, the cartridge is mounted to a holder that slides and locks into the vestigial headshell. Stylus overhang is adjusted (using the gauge supplied) prior to mounting the holder to the arm. The gauge leaves little room for the brush assemblies fitted to some pickups, so these may have to be removed during

mounting. The adjustment slots in the holder are quite wide, and care must be taken to orient the cartridge properly.

The cue height is adjustable, and although the feel of the cue control is very light, the arm motion is well controlled both on the way up and the way down. It also is accurate: The stylus returns within one groove of where it left.

We clocked the reject time of the CS-621 at slightly over 6 seconds; 9 to 10 seconds separate the pushing of the start lever and the first sounds from a speaker. In the continuous-repeat mode, the unit cycles in less than 8 seconds.

For our listening tests we used a pickup that delivers an arm resonance of approximately 8 Hz with the Dual. We found no difficulty in raising or lowering the dust cover with a disc playing. Since all controls on the turntable lie within the periphery of the cover, this is an important consideration for those who insist on closing the cover during use—a practice we avoid to prevent static charge from influencing tracking force. The suspension provides shock isolation that proves very good in the horizontal plane but no better than fair in the vertical; a thump on the floor readily induces groove skipping. As the measurements suggest, rumble and flutter are inaudible.

Although the lab data indicate that the mechanical filters on the Dual arm are effective in absorbing energy at the frequency of arm/cartridge resonance, the effects of record warps are not, thereby, totally nullified. You probably won't get into trouble using the CS-621 with a high-compliance pickup, but one with moderate compliance could be expected to do an even better job of tracking warps. Placement on a rigid, vibration-free shelf to minimize vertical motions transmitted from the floor is a good idea with any turntable and a near requirement with this one.

The Dual CS-621 delivers utterly smooth and quiet operation. Speed stability and flutter are so good that further improvements would yield no audible benefit, and rumble is not too far behind. In the fully automatic, single-play sweepstakes, the 621 looks competitive indeed.

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Pioneer's Super Superreceiver

Pioneer Model SX-1980 stereo FM/AM receiver in walnut-veneered cabinet. Dimensions: 22 by 8½ inches (front panel), 17½ inches deep plus clearance for controls and connections. Price: \$1,250. Warranty: "limited," two years parts and labor. Manufacturer: Pioneer Electronic Corp., Japan; U.S. distributor: U.S. Pioneer Electronics Corp., 85 Oxford Dr., Moonachie, N.J. 07074.

In the latest lap of the Receiver Power Grand Prix, Pioneer is among the leaders with the SX-1980, rated at 270 watts (24¼ dBW) per channel. Whether such a receiver offers any tangible advantage over one rated at ¼ dB less (250 watts) or suffers any noticeable lack of oomph compared with ½ dB more (300 watts) we'll let you decide. But it is certain that one no longer need go the separate route to provide abundant muscle in the system.

The tuner portion of the SX-1980 ranks with the best. The sensitivity is outstanding and the quieting curve extremely steep. Noise is suppressed to -50 dB with mono inputs at a level at which many tuners barely manage -30 dB. In stereo, too, equivalent quieting requires exceptionally little signal. At the ends of the band, the sensitivity diminishes a trifle but not by more than 1½ dB in either mode. Ultimate signal-to-noise ratios (measured at 65 dBf) are excellent.

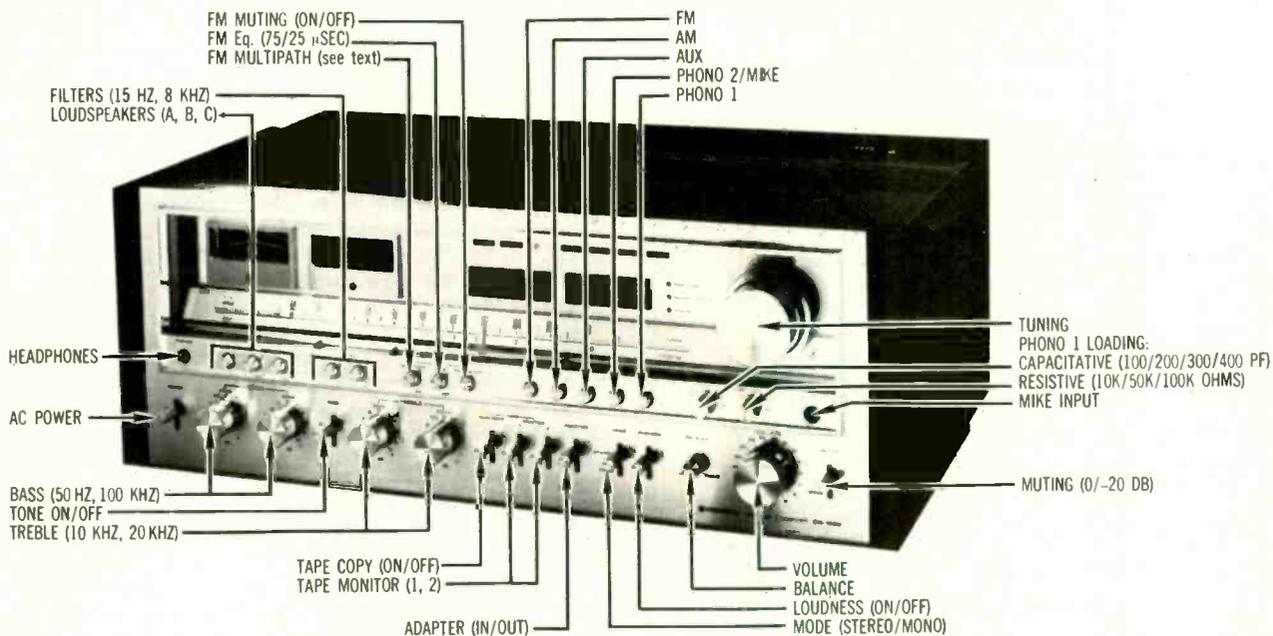
The IF bandwidth, which is nonadjustable, seems like a good compromise between selectivity and midband harmonic

distortion. Intermodulation distortion is even lower than THD. The automatic pilot-canceling circuit (as opposed to the once-standard pilot filter) does an excellent job of suppressing stereo-multiplex by-products while preserving frequency response and stereo separation—the latter, in particular, at a level that few receivers or even separate tuners can match—all the way to the 15-kHz limit of FM transmission; the frequency response is almost the same in mono and stereo.

The SX-1980 meets its power rating with a smidgen to spare when both channels are driven. At rated power, the distortion barely reaches half the tight 0.03% spec. But while the power is abundant, little remains in reserve; dynamic headroom is just ¼ dB. Like many separate superamps, moreover, the power amp section requires that the AC input really stay at 120 volts (which domestic supplies seldom do) for the full rated output. But in such amps the high power rating is itself a form of headroom—a hedge against the demands of musical peaks and reduced voltages in the power distribution system.

Low-frequency damping factor is adequate for any speaker we know of. Sensitivity and signal-to-noise ratio are good on all major inputs, and the phono-overload level is adequate for just about any cartridge. Phono equalization remains exact from 100 Hz to 20 kHz and falls no more than 1 dB at 20 Hz. The subsonic filter essentially has no effect on music.

Two sets of bass and treble tone controls are provided. The 11-position 100-Hz control induces a shelving response that



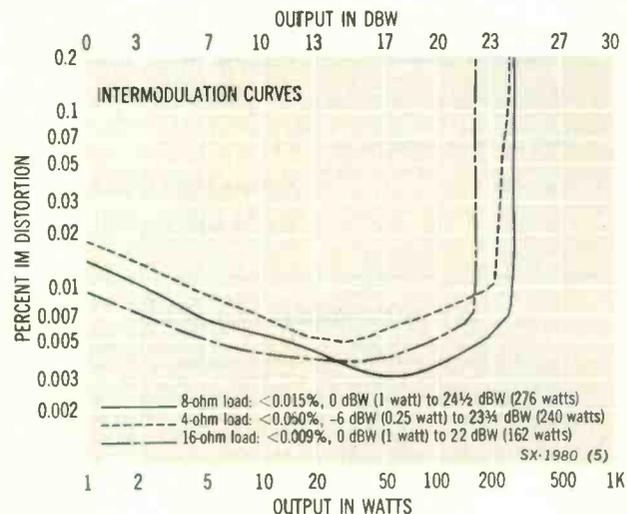
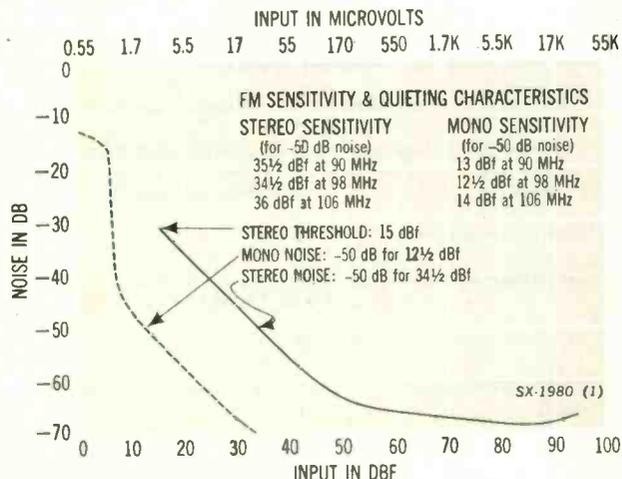
reaches +13 and -14½ dB at the lowest frequencies, hinging from a 400-Hz turnover point. To this can be added the 5-position 50-Hz control that provides a spread of ±3 dB at 50 Hz and +8 to -9 dB at 20 Hz. At the high end, the 10-kHz control reaches +10 and -11 dB at 20 kHz from a 1.5-kHz turnover, and approximately ±5 dB additional is offered by the 20-kHz control. The loudness contour boosts both the bass and treble ends of the spectrum.

Tape dubbing in either direction between two decks can take place whatever input is being monitored. An external processor loop inserts your choice of a signal-conditioning add-on into the circuit; should you go for the Dolby decoder, the FM de-emphasis can be changed to 25 microseconds via a pushbutton. Other accessories can be added between the preamp and power amp by disconnecting a back-panel link.

A choice of 10,000, 50,000, or 100,000 ohms is available for resistive termination of phono cartridges, with capacitive shunts of 100, 200, 300, and 400 picofarads available as well. A rear-panel slide switch activates an RF-suppression filter in the phono circuit to silence any of your intrusive "good buddies." Dual power meters indicate the output power (as usual, into 8-ohm loads, requiring interpretation with respect to the loudspeaker's actual loading) both in watts (0.01 to 540) and in decibels (-40 to +3 relative to the 270-watt rating). Three pushbuttons enable selection of any two of three sets of speakers in combination: an attempt to make "unauthorized" use of all three will elicit stony silence from the receiver.

The extremely good sensitivity of the FM section not only enabled us to receive more stations in our area than usual, but brought in several that had been only marginal on other receivers with lower distortion and improved quieting.

The signal-strength and tuning meters are both adequately sensitive, though the latter is redundant with Pioneer's Automatic Phase Control and Touch Sensor tuning system. As the receiver is tuned within 10 kHz of the station, a red LED FINE TUNE lamp illuminates. Releasing the tuning knob causes the receiver to home in on the station precisely—a condition indicated by a green QUARTZ LOCKED LED. The system works very well in practice, although in our tests there were a couple of spots in the band at which the tuner registered "lock" when receiving noise. Tuning remains stable except when the effort is made to bring in a very weak station adjacent to a very



Pioneer Model SX-1980 Receiver

Tuner Section

Capture ratio	1½ dB		
Alternate-channel selectivity	72 dB		
Frequency response			
mono	+ ½, -¼ dB, 20 Hz to 15 kHz		
L ch	+ ½, -¼ dB, 20 Hz to 15 kHz		
R ch	+ ¾, -¼ dB, 20 Hz to 15 kHz		

Channel separation > 38 dB, 20 Hz to 15 kHz

THD	Mono	L ch	R ch
80 Hz	0.075%	0.11%	0.013%
1 kHz	0.065%	0.013%	0.013%

IM distortion 0.055%

19-kHz pilot -66 dB

38-kHz subcarrier -68 dB

S/N ratio (at 65 dBf)	
mono	76 dB
stereo	67 dB

Amplifier Section

Manufacturer's rated power 24¼ dBW (270 watts)

Power output at clipping (channels driven simultaneously)	
L ch	24½ dBW (280 watts)
R ch	24½ dBW (280 watts)

Dynamic headroom ¼ dB

Frequency response +0, -1 dB, 10 Hz to 40 kHz
+0, -2½ dB, below 10 Hz to 100 kHz

RIAA equalization +0, -1 dB, 20 Hz to 20 kHz

Input characteristics (re 0 dBW (1 watt); noise A-weighted)

	Sensitivity	S/N ratio
phono 1	0.165 mV	77 dB
phono 2	0.160 mV	77 dB
mike	0.47 mV	64 dB
aux	6.45 mV	89½ dB
tape 1	6.70 mV	89½ dB
tape 2	6.80 mV	89½ dB

Harmonic distortion (THD + N; 20 Hz to 20 kHz)	
at 24¼ dBW (270 watts)	L ch: <0.015% R ch: <0.014%
at 10 dBW (10 watts)	L ch: <0.013% R ch: <0.014%
at 4¼ dBW (2.7 watts)	L ch: <0.020% R ch: <0.021%

Phono overload (clipping point) 330 mV at 1 kHz

Damping factor at 50 Hz 57

High filter -3 dB at 8.3 kHz; 12 dB/octave

Low filter -3 dB at 19 Hz; 6 dB/octave

NEW MEASUREMENT STANDARDS

In making comparisons between current reports and those published in the past, readers are cautioned to pay particular attention to the reference levels and similar test criteria cited. S/N ratios for electronics, in particular, are measured very differently now that we have adopted salient features of the new IHF amplifier-measurement standard. While we believe that the new technique (which also implies a saner approach to loading of all inputs and outputs) will result in measurements that more perfectly reflect audible, in-use effects, they cannot be compared directly to the numbers resulting from the former, more conventional lab measurements.

strong one. In this case, thanks to the very narrow lock range, we find we can defeat the system by tuning very slightly away from the stronger station. And on the vast majority of stations, the lock system produces excellent results.

The muting circuit effectively eliminates interstation noise, but spinning the dial through a cluster of stations will cause the audio to cut in and out. When the MULTIPATH button is depressed, the multipath distortion is presented through the loudspeakers and the signal-strength meter continues to indicate the total effective signal level. Thus the antenna can be oriented for minimum multipath (that is, minimum output to the speakers) and adequate signal strength (on the meter) simultaneously, which some switchable-meter systems cannot.

The dual tone controls provide plenty of boost for those who want it as well as precise adjustment for those inclined to subtlety. Used in combination, they can simulate the effect of a broadband equalizer. The effect of proper (or improper) phono-cartridge loading is made manifest by manipulating the phono-load switches. When set to match the cartridge in use (the owner's manual suggests the appropriate settings for the major cartridges), the phono section of the SX-1980 is indeed excellent. Engaging the RFI filter produces a slight high-frequency coloration, but one we think we could live with when the defensive function of the filter is called for; it was not needed during our test period, so we got to fix on its efficiency in suppressing RFI.

The investment in an SX-1980 is certainly substantial, but a system composed of separates with the same power capability, control flexibility, and tuner performance would be virtually impossible to assemble for a comparable cost. (And, if it could be, shopping around for it might take quite a while.) Anyone interested in such a system owes himself an audition of the SX-1980. Pioneer has truly put it all together.

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No. 1 Performer of a New Pickup Breed

Acutex M-320-III stereo/CD-4 phono cartridge, with STR multiradial diamond stylus. Price: \$175. Warranty: "limited," one year parts and labor. Sole distributor: Acutex International, 246 W. Broad St., Falls Church, Va. 22046.

The birth of an audio company most often is an event noticed only by a keen-eyed few as, typically, yet another group of inspired zealots launches a sparse product line that it hopes will expand enough to command some attention in the marketplace. Instances in which a company emerges mature like Diana from the head of Jove are relatively rare. The introduction of six phono cartridges, ranging in price from \$35 to \$175, by Acutex International is just such an instance; and it excites considerable curiosity. Accordingly, we chose to test the top model of the series.

The most prominent attribute of the Acutex line is its separation—which, in fact, turns out to be better than average. A novel (and patented) induced-magnet system using three poles is designed to fix the stylus pivot point and reduce unwanted crosstalk and distortion. Model 320 and, just below it in the line, Model 315 use a special stylus shape designated STR (for Symmetrical Tri-Radial) and claim bandwidth to be beyond 20 kHz. The latter claim was not addressed by our testing procedures.

The range of recommended load resistance for the M-320-III is 30,000 to 100,000 ohms, but since most consumer equipment uses a 47,000-ohm load in the phono section, that value was used for the lab tests. Tracking force used was 1.2 grams, the mean of the recommended range and slightly higher than the minimum force at which the pickup could track the sweep test. Output voltage for a standard level of groove modulation is fairly high, and at 1 kHz the two channels match very well indeed.

Frequency response remains within the claimed $\frac{3}{4}$ dB of flat from 20 Hz to 9 kHz—at which point some factor, perhaps related to the interaction between the stylus tip and the vinyl of the test disc, begins to produce a modest peak centered slightly below 20 kHz. (The Acutex specs, according to information supplied by the company, were derived from measurements with a different test record.) The resonant effects of this interaction also degrade the high-frequency separation a trifle by comparison to the manufacturer's spec.

That results measured in this region vary with the test disc is now fairly well established. Thus the fact that this cartridge appears to fall short of its specs when measured with the CBS STR-170 neither alarms us nor leads us to conclude that it cannot perform as claimed on another disc. (For practical purposes, we note that the vinyl of music records is at least as variable as that of test records and that measurements as fine as those necessary to evaluate a cartridge of this class can be upset by minuscule errors in mounting.) The point, in any event, is that the measured performance still is excellent.

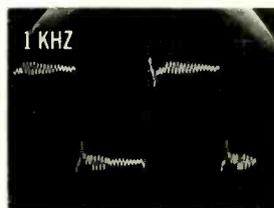
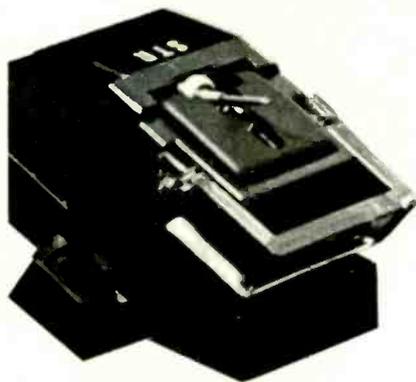
Low-frequency behavior of the Acutex is close to exemplary. The resonances in the SME arm are close to the "ideal" points—particularly the vertical plane, which is apt to be the more troublesome when it is excited by warps. Both resonances seem fairly well damped. We would expect most high-quality arms to coexist with the Acutex very successfully; only in extremely low-mass arms might there be any question of the resonance impinging on the audible range, and only in excessively massive ones could it be forced down into the worst warp-frequency range.

In tests of tracking ability, the pickup ran the gauntlet well. Unusually for cartridges these days, the vertical tracking angle is right on at the "standard" 15 degrees. IM distortion is very good and much lower than average. The square-wave trace reveals fast rise and fall times, well-controlled overshoot, and ringing that, while rather pronounced, lies about an octave above the highest audible frequency.

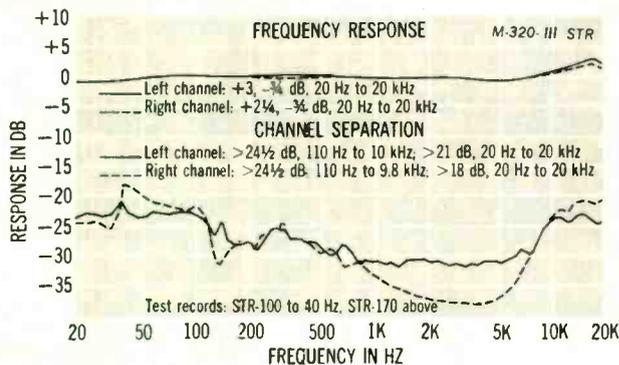
Installed in a turntable, the M-320-III tracks warps well and does not seem unusually sensitive to acoustic feedback or vibrations transmitted from the floor. Its sound while reproducing music is sufficiently neutral to elude description—a plus, in our opinion. The upper treble region is a trace brighter than with some other cartridges, yet when we compare the sound of the M-320 with that of an esteemed member of the competition we find that—though the two do not sound quite alike—there is no obvious reason to prefer one to the other. Whether traceable to the high separation or not, the stereo image has a superior sense of detail and depth. All the discs we played, direct-cut, digitally mastered, or garden-variety, were extremely well reproduced.

At the bottom line, the Acutex M-320-III strikes us as an excellent pickup. It is astonishing that a newcomer could so readily elbow its way in among the leaders. (Credit for its qualities belongs, according to the company, to the patented transducer design; we are more interested in results than in means.) In general, the M-320 sounds as good as any pickup around. For particulars, you should go and listen for yourself—it's well worth the trouble.

CIRCLE 133 ON PAGE 141



Square-wave response



Acutex M-320 III STR Phono Pickup

Sensitivity (at 1 kHz)	0.96 mV per cm/sec
Channel balance (at 1 kHz)	$\pm \frac{1}{2}$ dB
Vertical tracking angle	15°
Low-frequency resonance (in SME 3009 arm)	
vertical	4 dB at 8.8 Hz
lateral	4 dB at 8 Hz
Maximum tracking level (re RIAA 0 VU; 1.2 grams VTF)	
300 Hz	+18 dB
1 kHz	+9 dB
Weight	6.85 grams
Tip dimensions	
tip radii	6.27 by 10.44 micrometers
scanning radius	7.52 micrometers

Correction

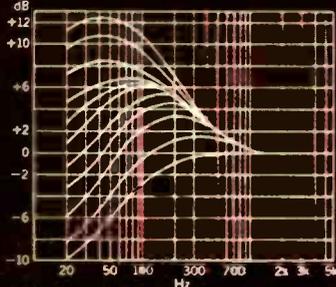
Our review of the ADC XLM Mk. III phono pickup (September) credited it with ADC's Aiptic stylus configuration used on the ZLM. The XLM's is, in fact, a nude elliptical diamond mounted on a tapered cantilever.

Power. With distortion so low it's more than inaudible, it's barely measurable. That isn't news. It's Technics.

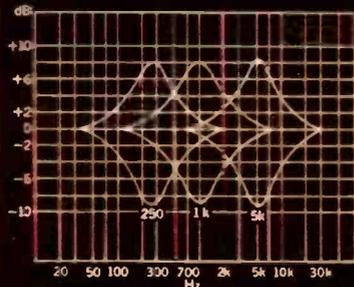
Stereo Receivers	Min. RMS Power Per Channel into 8 Ohms from 20Hz-20kHz	Total Harmonic Distortion at Rated Power (Max.)	FM Sensitivity Stereo-50dB*	Phono S/N (10mV HF A)
SA-1000	330 watts	0.03%	36.2 dBf	97dB
SA-800	125 watts	0.04%	36.2 dBf	95dB
SA-700	100 watts	0.04%	36.2 dBf	95dB
SA-600	70 watts	0.04%	37.2 dBf	90dB
SA-500	55 watts	0.04%	37.2 dBf	90dB

* IHF 75 standard

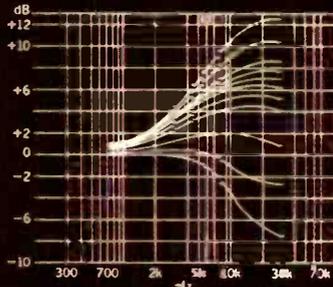
Look at the chart. That's Technics, too. Surprisingly good performance that comes as no surprise.



Bass Control characteristics (Low Boost: On)



Midrange Control characteristics (variable range)



Treble Control characteristics (High Boost: On)

Still, you expect the unexpected from Technics and with Acoustic Control that's just what you get. With

the low-boost switch and the bass control, you can accentuate drums and bass instruments with a minimum of boominess. Or use the treble high-boost switch to bring out the brilliance in both vocals and instrumentals by boosting the frequencies starting at 2 kHz, all the way up to 30 kHz.

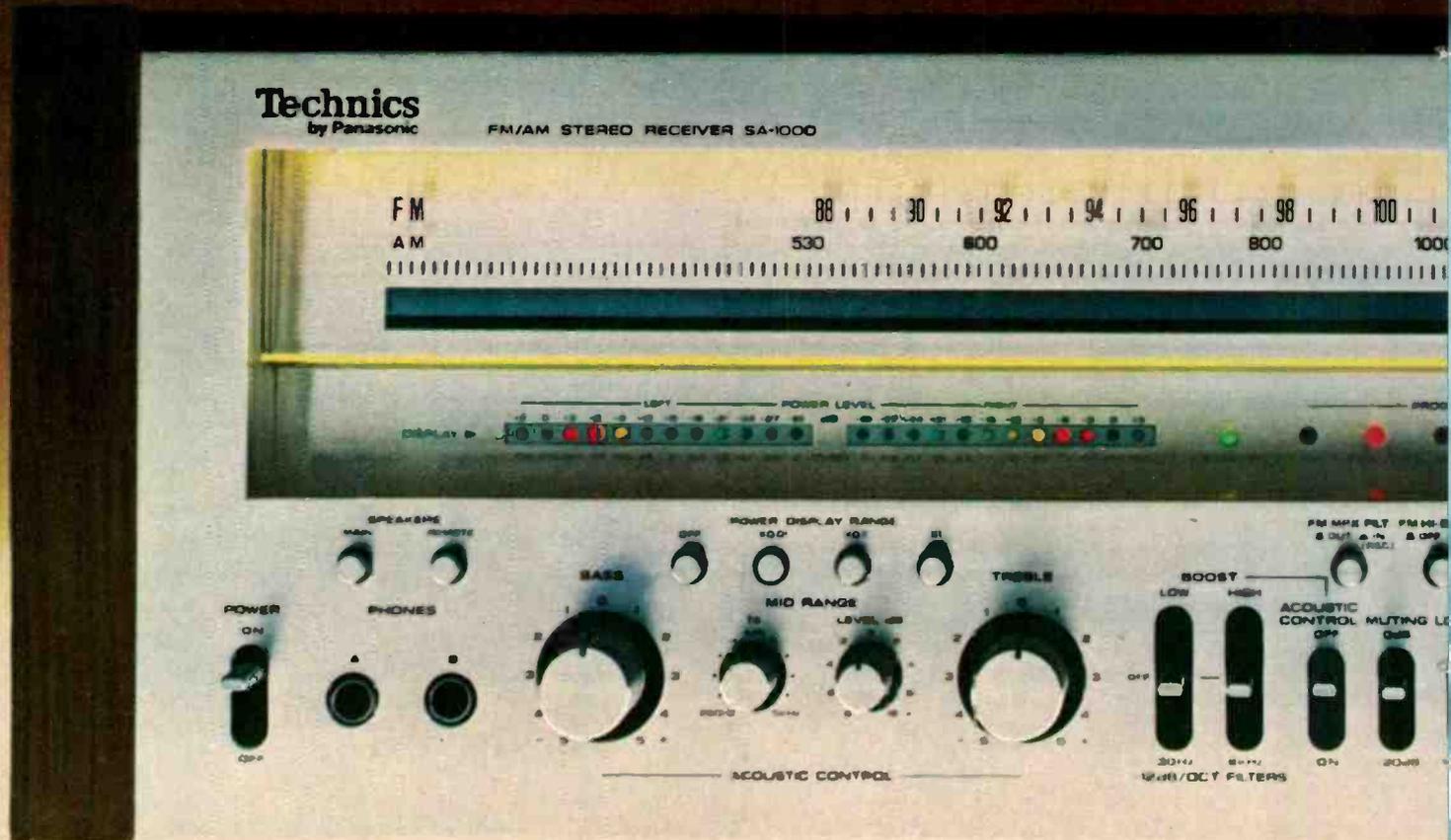
You can also decrease the bass response starting at 100 Hz, or attenuate high-frequency response, thereby suppressing hiss and other noise. And with the SA-1000 shown below, there's a midrange control with a variable center frequency adjustment. So you

can isolate any frequency between 250 Hz and 5 kHz. Then boost or attenuate it, according to your needs.

Still, you don't have to buy our most powerful receiver to get our most sophisticated circuitry. Because every

Technics receiver has direct coupling, conservatively rated power supply capacitors, current mirror loading

Big power with little distortion from Technics isn't news. Acoustic Control is.



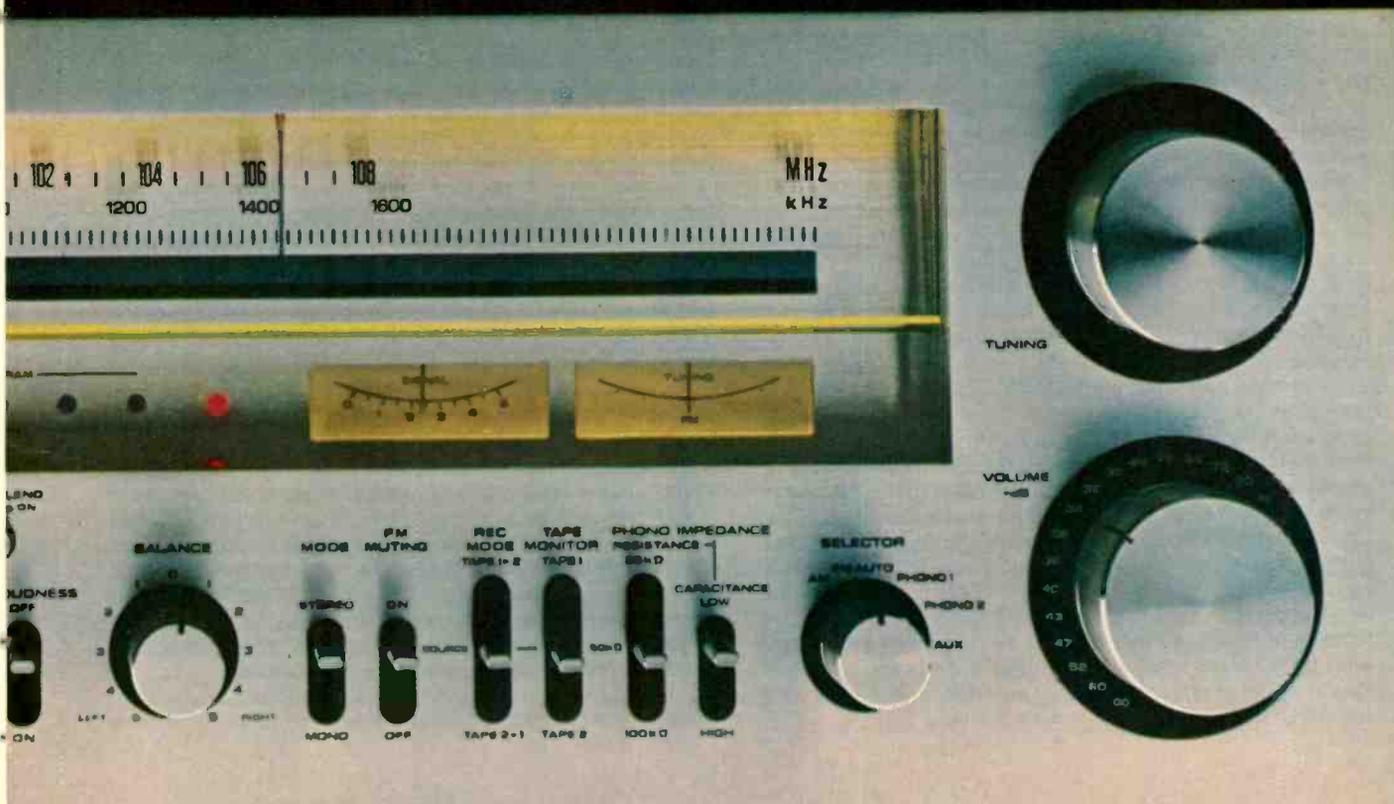
and single-packaged matched-pair dual transistors. They all add up to one thing: An amplifier that's clean and stable even under the most demanding dynamic conditions.

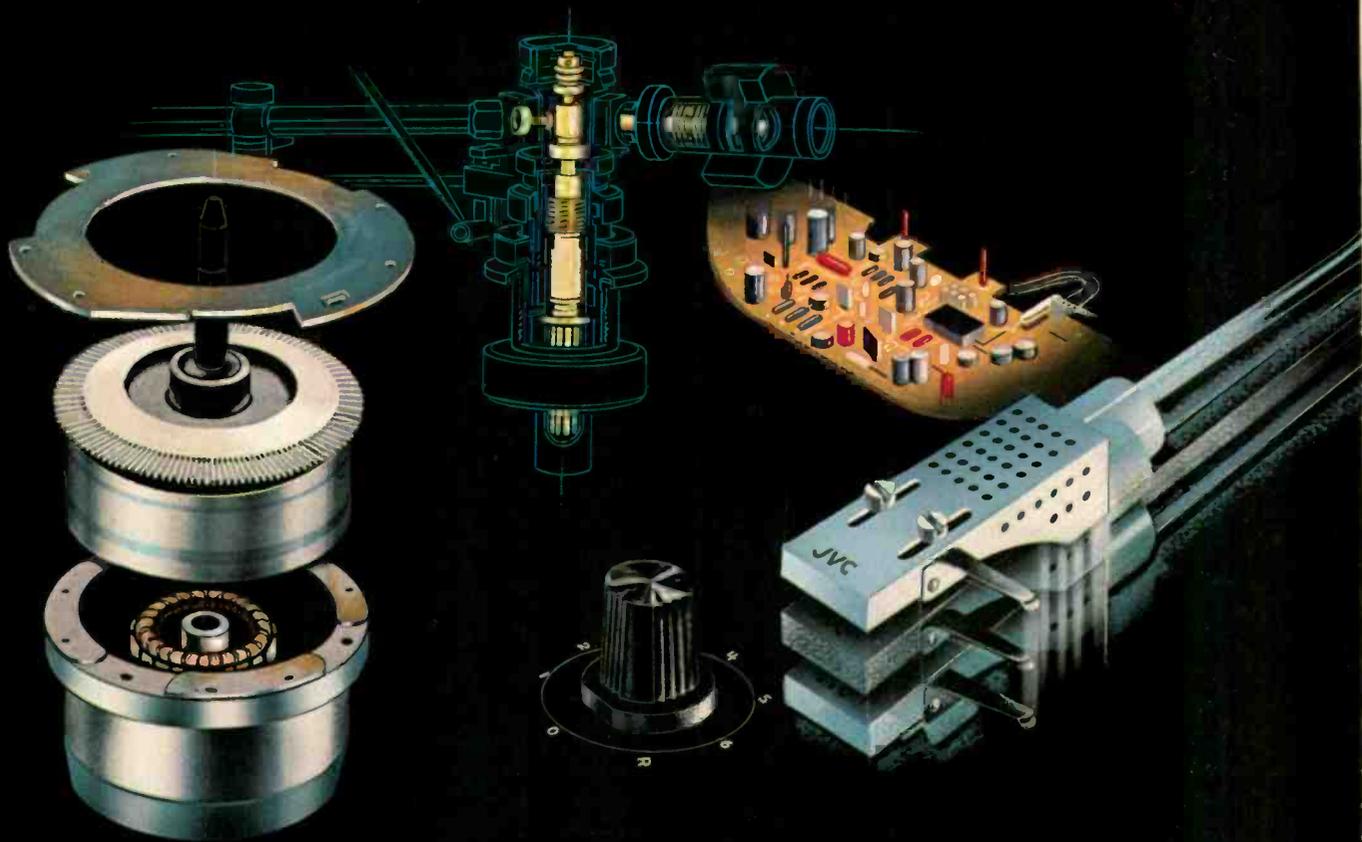
All your records will love the phono equalizer section in every Technics receiver. Because they all boast super-quiet S/N ratios, an extremely wide frequency response and an overload-resistant phono pre-amp.

For outstanding performance on FM, even from an overcrowded band or a marginal signal, every Technics receiver has Phase Locked Loop IC's, flat-group delay filters and a frequency response that's both flat and wide. And with LED power level indicators, your eyes can see what your ears will hear. Because Technics separated each channel's indicators into individual power levels—from as low as 0.3 watt to as high as 700 watts. And what's more, at the flick of a range switch, the indicators will read up to 100 times the actual power generated. With far greater accuracy than conventional mechanical meters.

Technics new receivers. Big power with little distortion as well as outstanding performance isn't news from Technics. Giving you more ways to control it, is.

Technics





THE JVC QUARTZ-LOCKED TURNTABLE.

First we invented it. Now we've made it more precise than ever.

The turntable evolution comes full-swing with the introduction of the new JVC Quartz turntable series. Since we introduced the world's first Quartz-controlled turntable in 1974, we've been constantly refining the ultra-precision oscillator circuits and improving the characteristics of our motor drive system. We've also added a host of details that offer a wide choice of features spread over eight different models. And we can now honestly state that JVC speed and accuracy are near absolute. Here's why:

SUPER SERVO FREQUENCY GENERATOR

The need to detect minute variations in platter speed and to send corrective information to the electronic circuits controlling platter rotation is inherent in a servo system. Our quartz-controlled drive mechanism provides practically perfect speed accuracy; the Super Servo additionally reduces the error in detecting even the tiniest speed variations to nearly zero. We therefore make doubly sure that the platter is "on speed," and will retain this factory-set accuracy over many long years of use.

DIRECT-DRIVE DC SERVOMOTOR

Quick-start and quick-stop, along with high-torque are combined in the DC direct-drive servomotors in all JVC Quartz-Locked turntables. The powerful motor-drive system and its companion speed-monitoring circuits reduce wow-and-flutter as well as speed drift, practically to the vanishing point. In addition, extra care has been taken to make sure that motor-related resonances have been completely damped-out.

NEW GIMBAL SUPPORT AND TRACING-HOLD (TH) TONE ARM

Our exclusive rugged unipivot gimbal support holds the tone arm's total mass in a way that is friction-free. Highly sensitive and responsive, it prevents the stylus from losing contact with the record groove walls, no matter how rough that "ride" may be. And it's included on almost all JVC Quartz turntables—even the automatics. The JVC developed Tracing-Hold tone arm provides the stability and tracing accuracy needed for the cartridge to follow even the most complex record grooves without tracking error.

All of this, plus features like digital speed read-out, quick stop and start, top quality solidly-constructed bases and electronic switching mechanisms all work together to give you more musical pleasure than ever before. There are totally manual models, as well as ones with auto-tone arm liftup/stop, auto-return and fully automatic features.

Bring the precision of QL accuracy into your music system. See all these precisely great turntables at your JVC dealer soon.

JVC America Company, Division of US JVC Corp., 58-75 Queens Midtown Expressway, Maspeth, N.Y. 11378. Canada: JVC Electronics of Canada, Ltd., Ont.

JVC

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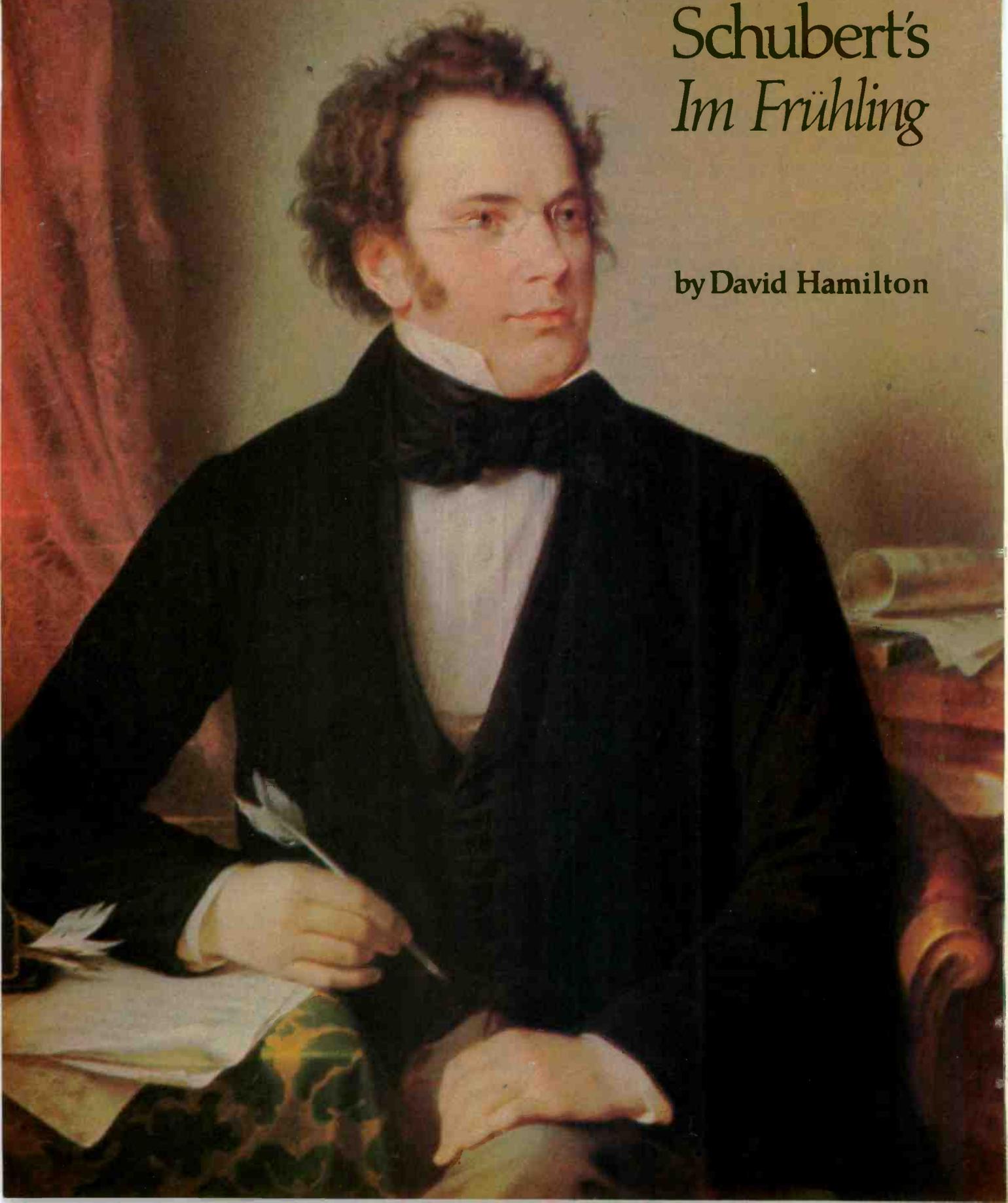
QL-F4 (featured at left). Below: QL-10, QL-A7, QL-7 (top row); QL-50, QL-5, QL-A2 (bottom row). Not shown: QL-8 (Quartz), JL-F30, JL-A20 (Belt Drive).

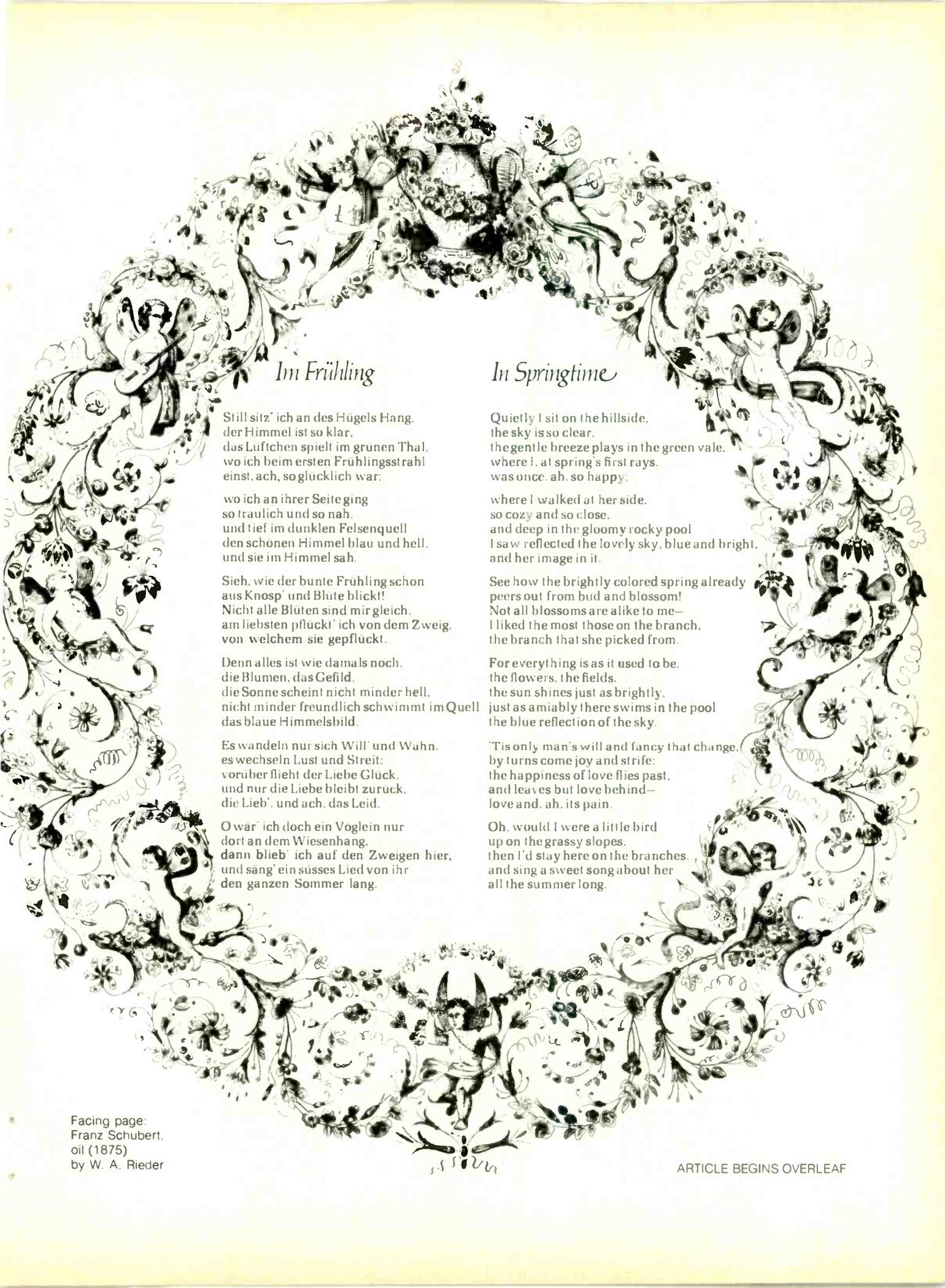


**HIGH
FIDELITY**

The Secret Life of a Song: Schubert's *Im Frühling*

by David Hamilton





Im Frühling

Still sitz' ich an des Hügels Hang,
der Himmel ist so klar,
das Luftchen spielt im grünen Thal,
wo ich beim ersten Frühlingsstrahl
einst, ach, so glücklich war:

wo ich an ihrer Seite ging
so traulich und so nah,
und tief im dunklen Felsenquell
den schönen Himmel blau und hell,
und sie im Himmel sah.

Sieh, wie der bunte Frühling schon
aus Knosp' und Blüte blickt!
Nicht alle Blüten sind mir gleich,
am liebsten pflück' ich von dem Zweig,
von welchem sie gepflückt.

Denn alles ist wie damals noch,
die Blumen, das Gefild,
die Sonne scheint nicht minder hell,
nicht minder freundlich schwimmt im Quell
das blaue Himmelsbild.

Es wandeln nur sich Will' und Wahn,
es wechseln Lust und Streit;
vorüber fliehet der Liebe Glück,
und nur die Liebe bleibt zurück,
die Lieb', und ach, das Leid.

O wär' ich doch ein Voglein nur
dort an dem Wiesenhang,
dann blieb' ich auf den Zweigen hier,
und säng' ein süßes Lied von ihr
den ganzen Sommer lang.

In Springtime

Quietly I sit on the hillside,
the sky is so clear,
the gentle breeze plays in the green vale,
where I, at spring's first rays,
was once, ah, so happy;

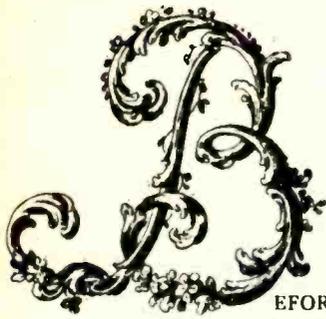
where I walked at her side,
so cozy and so close,
and deep in the gloomy rocky pool
I saw reflected the lovely sky, blue and bright,
and her image in it.

See how the brightly colored spring already
peers out from bud and blossom!
Not all blossoms are alike to me—
I liked the most those on the branch,
the branch that she picked from.

For everything is as it used to be,
the flowers, the fields,
the sun shines just as brightly,
just as amiably there swims in the pool
the blue reflection of the sky.

'Tis only man's will and fancy that change,
by turns come joy and strife:
the happiness of love flies past,
and leaves but love behind—
love and, ah, its pain.

Oh, would I were a little bird
up on the grassy slopes,
then I'd stay here on the branches,
and sing a sweet song about her
all the summer long.



BEFORE LISTENING to the song, consider the words. Schubert's *Im Frühling* (D. 882) sets a poem by Ernst Schulze (1789-1817), a lecturer in philosophy at the University of Göttingen, whom Schubert never knew personally. Schulze's *Poetisches Tagebuch* (*Poetical Diary*) evidently came into the composer's hands around 1825, for during that year and the first months of the next he made songs out of ten of the poems it contains. This is one of the last, composed in March 1826 and christened *Im Frühling* by Schubert himself, for in Schulze's book it is identified only by the date of its invention: "on 31 March 1815."

The sense of the poem is not obscure: They loved in the first flush of springtime, and now she is gone. We are not told why—inconstancy? death?—and that clearly isn't the point. The poet is telling this not for its own sake, but to draw from it a generalization. Despite his loss, nature remains as attractive and beneficent as before; it is only human affairs that change—how much better to be a part of simple, passive nature! For all its melancholy import, the poem isn't lachrymose. In the first four of its six stanzas, only a fleeting reference at the end of the first makes explicit the passing of the poet's happiness. The "moral" is carefully sequestered in the fifth stanza. Most of the words describe the pleasures of spring and of love in springtime, and, as we shall see, Schubert takes that as the cue for the emotional tone of his setting.

Poems such as this one, regular in meter and stanzaic pattern, always invite the possibility of strophic setting—that is, the same music repeated for each stanza (with, if necessary, minor modifications to accommodate metrical irregularities later on). This type of setting, prevalent in folk-song, is naturally most appropriate for simple poems without pronounced changes of mood. At the opposite pole is what we call the through-composed song—each stanza set to new music, which can thus reflect changing events or emotions. In practice, most through-composed songs use some musical repetition, its particular occasions suggested by the narrative progress of the poem. Schubert experimented frequently and inventively with mixtures of the two types, and they constitute the mental backdrop against which we should listen to his songs.

With the words before us, let's now listen to *Im Frühling* a first time, to grasp its general lines. Certainly nothing could be more inviting than the warm, gracious melody that unfolds first from the piano: a two-bar phrase curving down and then up, repeated with a longer upward reach at the end, leading this time to a full close. As well as classically symmetrical, this is an eminently singable tune—but the voice enters with something different altogether, and makes its way through the first stanza. (We'll come back to the details later, including that repetition of the last three words of the stanza that you doubtless noticed.)

Now the piano takes up its introductory melody once more. Were there time to stop and think what is happening, we might well hazard the deduction that Schubert has gone back to the beginning and will set Stanza 2 by repeating all the preceding music; that would be the normal strophic way of doing things. But we don't have much time to consider that possibility, for before the piano has finished one bar the voice joins in, starting Stanza 2 with the second bar of the piano tune, extending and developing it to encompass these five lines.

Now another point of multiple potential: Will the next music be still different, or a repetition of something heard earlier? The piano leads up into a higher register, where it plays its original strain, now embedded in a purling figuration over an oompah bass; without much effort, we can construe this more "flowery" version as representing spring's awakening blossoms, to be described at the beginning of Stanza 3. This time, we do get the whole piano tune, and when the voice enters with familiar material it seems probable that we are in for what will prove to be, except for the more ornate accompaniment, essentially a repetition of all that has gone before. In fact, this is what happens; Schulze's Stanzas 3 and 4 are set to the same music as his first two. In effect, Schubert has now twice grouped two poetic units into one musical one, and we might now conjecture that he will follow suit for Stanzas 5 and 6 (with, perhaps, a fresh pattern in the piano part).

What ensues is somewhat different, however: The piano tune's initial descent is expressed in a rockier, offbeat rhythm, in a minor key—and, instead of turning upward, it keeps on descending. After only two bars (instead of the usual four), the voice enters, its familiar material now also trans-

lated into the minor key. With some modification, things proceed as before to a somewhat stronger climax at the end of Stanza 5, after which the piano's syncopated pattern calms down, somewhat tentatively expressing the major mode again.

This was a significant disruption; though no longer than the settings of other stanzas, and construable as a variation of the music for Stanzas 1 and 3, its considerable contrast to all that has gone before gives it greater formal weight, and we cannot be as confident about what will follow as we might otherwise have been. When the piano takes up its familiar tune in the familiar purling elaboration (though with its syncopated rhythm of the last episode now embedded—sublimated, you might say—in the accompaniment, which is now an "oom-paAh-pah" rhythm), we are well aware that this tune has in the course of the song acquired two alternative significances: It can indicate either the beginning of Schubert's musical unit (its role before Stanzas 1 and 3) or the middle of it (its role at the start of Stanzas 2 and 4). This time, the voice's entrance after one bar establishes the latter: Stanza 6 will be set like Stanzas 2 and 4. Nature is continuing on her cheerful path as if the disruption of Stanza 5 had not taken place; the only reminder of human inconstancy is that slightly restless rhythm in the piano's left hand.

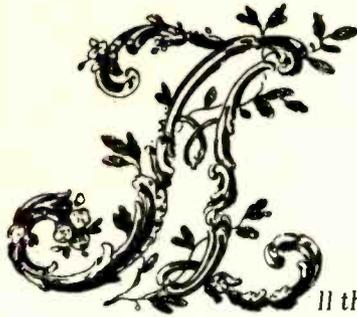
At the conclusion of Stanza 6, the piano proceeds as if to start yet another formal unit (the left hand now returning to the more stable "oom-pah")—but, as the voice quickly joins with a quiet repetition of the poem's final lines, we realize this is only a coda: the last two bars of the original piano tune, making a full close upon which the piano briefly and very discreetly elaborates.

Conventional schematic descriptions of musical form—things like "aba" or even more sophisticated constructs such as "sonata-allegro form"—have certain limitations. First, they give you the whole picture at once—"picture," indeed, as if you were dealing with an art work that could be taken in as a whole right away, like a painting or a building. Music doesn't happen that way; you don't ever perceive a piece all in one instant. Rather, it unfolds in time, and the way to experience it most fully is to let it reveal its "form" as it

unfolds, rather than following it on some kind of road map with the entire course of the journey in full view from the start. Too, shorthand formulas tend to reduce whole groups of pieces to a single lowest common denominator. If we aren't careful, we can become so intent on not missing the next event on the "road map" that we neglect to enjoy the landscape along the way. We may miss, in fact, what makes this piece different from all the others.

Yes, *Im Frühling* can be called a "modified strophic song"—modified, specifically, by an infusion of "theme-and-variation form." That infusion takes place primarily in the piano part; except for the modifications required by the minor harmonies in Stanza 5, the voice sings exactly what it would in a normal strophic song; essentially the same music, three times through. This particular combination of formal techniques is unusual for Schubert, to be sure, and we should be aware of it—but over and above that there is the continuing formal interplay stemming from the ambiguous function of the piano's tune, an ongoing process that resists the schematization of standard labels.

What is the relation of all this "form" to the words it sets? At one level, the song's "strophicness" responds to the poem's regularity, without literally reflecting it. By using two of Schulze's stanzas instead of one as his musical unit, Schubert has achieved greater breadth, avoided a possibly choppy, more sectional effect. The variation technique, as we have noted, gives him an opportunity to mirror the blossoming of spring in Stanza 3. The episode in minor—a common feature of theme-and-variation pieces—both sets Stanza 5 apart and reflects its dolorous burden. The appropriateness of the gentle piano tune to the pastoral setting hardly requires comment. The significance of its role as a kind of "wild card" in the song's structure is harder to pin down literally; it does, at least, add a dimension of adventure or suspense to our experience of the song, beyond that possible in a straightforward strophic song (where the primary focus of interest after the first stanza is likely to be the interplay between fresh words and familiar music—a dimension that Schubert has, of course, not abjured in *Im Frühling*).



ll that is very well," you may say, "but what happens to that 'dimension of adventure' when we've heard the song many times and know exactly which direction it will go at each crossroads?" A fair question. That original "dimension of adventure" we might call "narrative ambiguity," to distinguish it from the semantic ambiguity much used by certain poets (this latter has its musical equivalent as well, in the multivalent function of certain chords), and it clearly doesn't survive extended familiarity with the work. Just as we can repeatedly enjoy a fine novel or film, however, we can continue to enjoy a piece of music, responding to those now-familiar "surprises" vicariously, as it were, while also discovering still new details of craft and inspiration on other levels.

There is a good deal more to discover in this song than we noted on first hearing. Before listening again, let's look more closely at the poem. Its ostensible posture is folklike, both in its pastoral ambience and its simplicity of expression. A very common pattern for German folk poetry, and for sophisticated imitations of it around the beginning of the nineteenth century, was a stanza of four lines, with three or four stresses each and a rhyme scheme of *abab* or *abcb*. Schubert set many such; Rellstab's *Ständchen* is a familiar one:

	STRESSES	RHYME
<i>Léise fléhen méine Liéder</i>	4	a
<i>dúrch die Náchte zu dir;</i>	3	b
<i>in den stíllen Háin herniéder,</i>	4	a
<i>Liébchen, kómm zu mir.</i>	3	b

If we scan Schulze's stanza,

<i>Still sítz' ich án des Hügels Háng.</i>	4	a
<i>der Hímmel íst so klár.</i>	3	b
<i>das Lüftchen spíelt im grünen Thál.</i>	4	c
<i>wo ích beim érsten Frúhlingsstráhl</i>	4	c
<i>einst. ách, so glúcklich war:</i>	3	b

we see that, for three and a half lines, it appears to be following the type: One would expect, in the fourth line, three stresses and a rhyme with "klar." Instead, there are four stresses and a rhyme with "Thal"; only after that do we get the line we were expecting. That fourth line is an intruder, an element of asymmetry that places the poem subtly distant from the naiveté it affects on the surface.

Schubert accepts this tone of apparent simplic-

ity in his decision to follow the poem's meter quite literally in the musical rhythm, matching the musical accents to poetic stresses on a one-for-one basis. (This is not an unusual procedure, but it isn't by any means an automatic choice; it's equally possible to stretch single syllables over several musical beats.) Since the four-stress line is prevalent in Schulze's poem, a four-beat-to-the-bar meter is indicated, fitting each line neatly in a bar; the shorter lines can easily be handled by extending their final syllables or by letting the voice sit out the final beat of the bar.

That's simple enough, and given suitable melodic and harmonic inspiration the poem would practically set itself—except for that "extra" line. That one-line-to-a-bar scheme would yield a series of five-bar phrases, definitely an oddity in the musical style of the period. Since a full discussion of this phenomenon would take us far afield, let us merely note that the preference, in most Western music, for symmetrical four- and eight-bar phrases is an observable fact, and that the harmonic and melodic procedures used by composers of the classic and Romantic periods are particularly suited to such regularity. This preference, however, didn't prevent those composers from experimenting with departures from the norms, finding ways to make those departures sound convincing.

It is on Schubert's responses to the "threat" of five-bar phrases that we will concentrate in our second look at the song. Given the identity of the three basic subdivisions in this respect, we'll discuss only the first of them—that is, Stanzas 1 and 2. (For convenience, we'll number the lines of those two stanzas continuously, from 1 to 10. And since the focus of attention will be much closer this time, you might find it handy to make a rough tape dub of your recording, to facilitate repetition of short sections as you read and listen.)

The piano's opening statement certainly exemplifies the norms of the style: four bars, divided into two equal parts, in the relationship that musicians call "antecedent and consequent"—that is, the second seems to answer and complete the first. It also establishes norms for this particular piece: the home key (Schubert wrote it in G major, if you care to know), the basic rhythmic pattern (four beats to the bar), the basic rate of harmonic change (usually a different chord on every beat), and the

Schubert evening at Josef Spaun's house—sketch in oil by Moritz von Schwind (1868): Schubert at the piano and, next to him, the tenor Michael Vogl



tempo (andante). The voice's opening lines,

(1) *Still sitz' ich an des Hügels Hang,*

(2) *der Himmel ist so klar,*

adhere to those norms, though introducing a different melody. The next line,

(3) *das Lüftchen spielt im grünen Thal,*

is essentially a repetition of the first line's melody, with "divisions"—ornamental extra notes—added, picking up the suggestion in the previous line ("ist so"). And the fourth line,

(4) *wo ich beim ersten Frühlingsstrahl,*

begins as if to repeat the second line—as if to complete a consequent to the antecedent posed by the first two lines. But the voice leaps up (to "beim") just a little higher than before (to "Him-mel") and we are suddenly in a new and brighter harmonic region (A major, if you're keeping track), instead of settling back to the home key as a proper consequent should.

This is, of course, the "extra" line in Schulze's poem, and Schubert has broken the normal pattern to accommodate it, to avoid reaching a full close (the musical equivalent of a period in prose) with a line of poetry left over. Having moved briefly away from the home key, he will need an extra bar to get back, and that will give him enough music to cover the remaining text. (The special character of this bar is emphasized by the hushed dynamics—or should be: Schubert marked it *ppp*, in contrast to the prevalent *pp*, but a surprising number of singers treat this rather casually.)

(5) *einst, ach, so glücklich war,*

(5a) *so glücklich war;*

This cry of grief turns the harmony to minor—but still, by the end of the original Line 5, the minor of the key of Line 4, so Schubert repeats the last three words, a step lower, to bring us out in the original key. (These extra syllables not only fill the space left in this bar by the short line; the last of them spills over into the next bar, ending the phrase on a strong first beat and reinforcing our sense of arrival; note that here and the parallel spots at the ends of Stanzas 3 and 5 are the only places in the entire song where a line ends on a downbeat.)

That strong beat in the voice overlaps with the beginning of the piano melody, the second bar of which the voice now picks up:

(6) *wo ich an ihrer Seite ging*

Charmingly unexpected and asymmetrical though this transfer may be, it really takes Schubert farther away from a solution to his compositional problem: Halfway through his four-bar tune, he still has four lines of poetry to accommodate. For the next line,

(7) *so traulich und so nah,*

instead of continuing the tune normally, he extends it upward in the voice, repeating and stretching out the half-close at the end of the previous bar (if a full close is the musical equivalent of a period, a half-close is like a semicolon; antecedent phrases generally end with half-closes, consequents with full closes). A three-bar phrase has just slipped under our noses; the reason it didn't sound odd is that it arose from the overlapping of two normal two-bar phrases: one, the first two bars of the piano melody; the other, the voice's two bars, the first of which "happened" to be the same as the second bar of the piano tune.

The voice now resumes the tune,

(8) *und tief im dunklen Felsenquell,*

as if to make a consequent. And it more or less does, taking a fresh harmonic and melodic turn in the next line,

(9) *den schönen Himmel blau und hell,*

leading to a climactic note (at "hell") that is marked to be held longer than usual (this is the "extra" line, and once again it is singled out by special treatment). From here, it's not far to home, and the next vocal phrase,

(10) *und sie im Himmel sah,*

actually settles on the home note—but the piano declines to cooperate, substituting a chord that deflects the expected finality. So the whole line is now repeated:

(10a) *und sie im Himmel sah.*

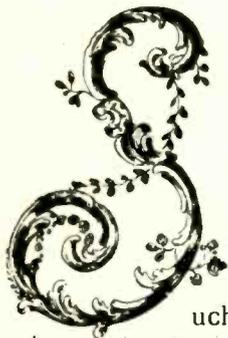
This time the voice ornaments its phrase, and the piano makes the expected full close.

Why does Schubert repeat that last line, making a four-bar consequent to a three-bar antecedent, when he could have settled for three and symmetry? First, because it wouldn't have sounded like symmetry; we didn't perceive that three-bar phrase as such, so cleverly was it made. Second, the scale of the climax in Line 9 calls for more counterweight than a single bar would provide. Third, ending the section with a four-bar phrase gives the impression of normality after all the ir-

regular goings-on before. Fourth, it rounds off the whole section (piano introduction included) at a satisfying length of sixteen bars—satisfying even if hardly the standard kind of sixteen-bar unit, made up of four four-bar phrases. Finally, the repetition of this line doesn't really surprise us, since it more or less parallels the (admittedly only partial) repetition of the final line of the first stanza.

I wouldn't for a minute argue that Schubert thought consciously of all—or any—of these reasons as he was composing; indeed, one imagines that his whole ingenious solution to the problem of setting this poem came to him almost somnambulistically, as inspired insights are said to come to scientists and mathematicians. The actual mental processes don't matter; however arrived at, the logic of the solution is irrefutable, and amply evident in the seamless way that this extraordinary congeries of odd-length phrases, extensions, interpolations, and overlappings flows along, superficially as artless as the merest folksong, concealing under its apparent naiveté a rather more complex substructure than does Schulze's quite modestly sophisticated poem.

Much has remained unmentioned here, including the subtle melodic alterations of the ensuing variations; it will have to be left as "an exercise for the reader." One final detail does demand attention: the last vocal phrase, in the coda. Here, for the first time in the song, the voice actually sings the final bar of the original piano melody. Perhaps we had not noticed its absence before, but its appearance here brings a special sense of closure.



Such a "close reading" of the song's inner structure has obvious bearing on how it might be performed. Phrasing, for instance: Though Schubert writes only one explicit rest for the voice in Stanza 1 (after Line 2), he can hardly have expected anyone to cover the remaining three lines in a single breath. The naive solution is to follow the poem's structure and break after every

line (also, perhaps, before the repetition of the final words). This is what Ameling, Cuénod, Schlussnus, Seefried, and Schwarzkopf do. (In Schwarzkopf's case, we may be sure that it was not done naively, but only after much consideration of alternatives, as her different choices later on confirm; no doubt the slowish tempo that she and Fischer elect has some bearing on the phrasing.) This is not a bad idea, for it underlines articulations already present; if it adds nothing, at least it upsets nothing.

Other choices are possible, with other consequences. Suppose you would like to phrase the first two lines together, to take the song in, so to speak, larger mouthfuls, as Bell, Hagegård, Pears, and Raskin do. If so, you probably ought to take the next two lines in one breath as well, for if you break after "Thal" you will give away the fact that what's coming up is a good deal longer than the expected consequent to the first phrase. Only Pears has realized that, phrasing all the way to "Frühlingsstrahl." The other three let that particular cat out of the bag by breaking after "Thal" so that they can link together Lines 4 and 5.

And there is a reason why they might want to make that link, for those two lines constitute a grammatical unit as well as a special harmonic area. If you make it, however, I think you must then break after Line 1, so that the break after Line 3 (though actually made to store up breath) will appear to be a normal parallel to the earlier break. It seems that Armstrong, Fischer-Dieskau, and Horne agree with me about this—there's no reason to believe that they are breaking after Line 1 because they're already out of breath!

Naturally, what is valid for Stanza 1 will not necessarily be the best solution in Stanza 3 or Stanza 5, even though the music is substantially the same. One of the challenges of performing a strophic song—and, from the singer's point of view, that's essentially what this one is—lies in the potential for varied articulations of the same musical material when fresh words, with different grammar and different meanings, are fitted to it. Thus, with but one unimaginative exception (Schlussnus), no singer I've heard in this song mechanically duplicates his phrasing from one section to the next. And some of them keep experimenting, from one recording to the next (though not always of their own volition—it's regrettably clear that the new phrasings of Hotter's third recording came about because he could no longer manage the ambitious

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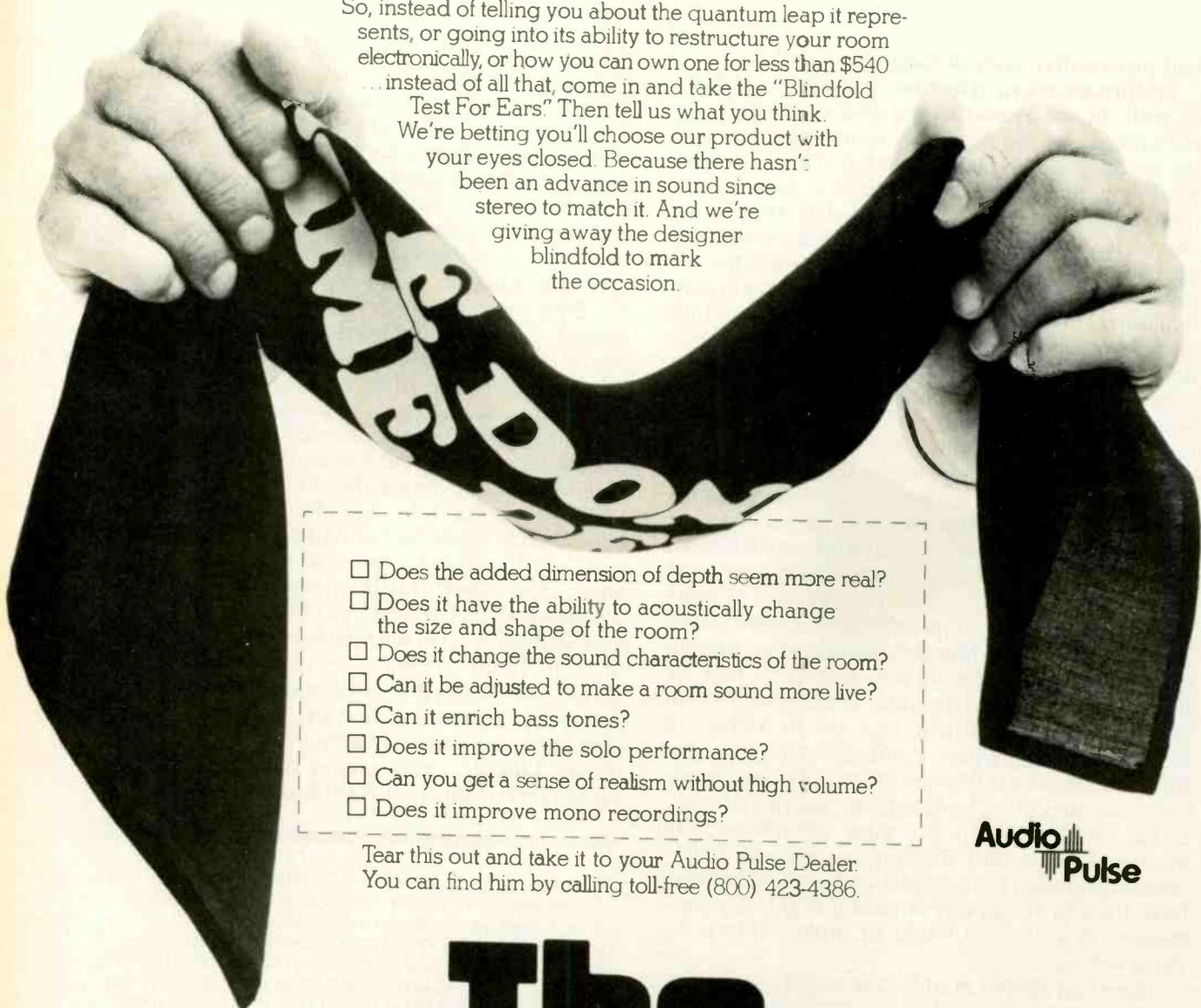
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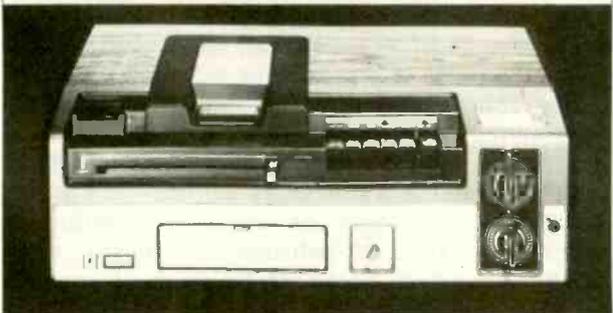
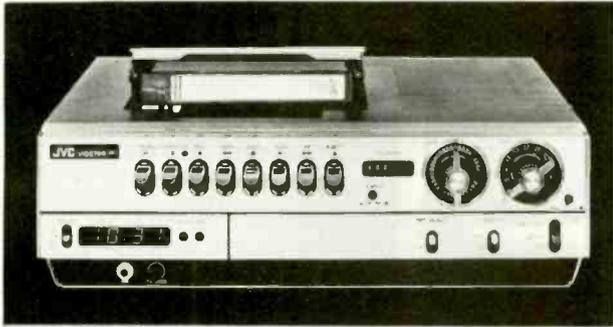
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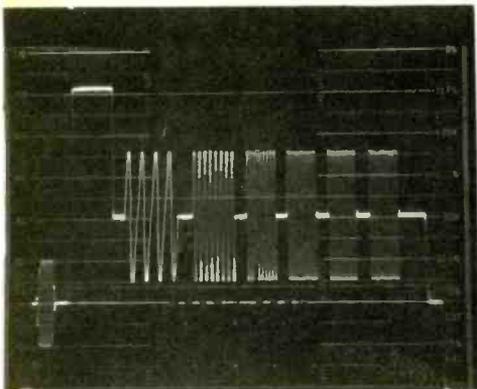
First Full-Scale Reports: Video Cassette Recorders at Home and in the Lab

by Robert Long

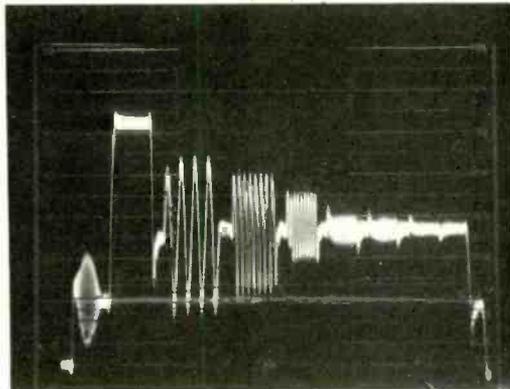
THE GLAMOR PRODUCT of the decade in home entertainment surely is the video cassette recorder. Until recently that glamor has been enhanced—even engendered, some would say—by the elusiveness of VCR products that were both effective and affordable. But the barrier has been destroyed in the last two years or so by a number of systems that sell in the \$1,000 range for the deck and are designed to be used with a standard home television receiver.

We have tested five decks in this category and can report unequivocally that they all do work—not equally well, by any means, but we'll get to that. Both on the test bench (at CBS Technology Center) and in our living rooms they broaden the horizons of home entertainment in exciting ways. All are, in Quasar's phrase, "time machines" that offer an escape hatch from the otherwise inexorable confinements of *TV Guide* and Home Box Office listings: You can watch two networks' offerings in the same time slot by saving one of them on tape while you view the other—or, when the listings make you listless, you can turn to a recorded library for your programming. That you also can use these decks to create your own programming with camera and mike goes without saying, though this report concerns itself primarily with the use of

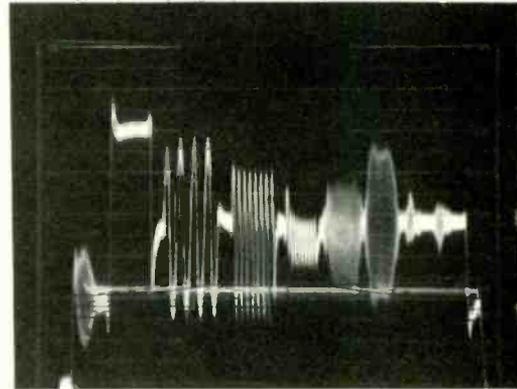
Five VCR decks compared for this report are, from the top: JVC Vidstar HR-3300U (2-hr. VHS); RCA SelectaVision VBT-200 (4-hr. VHS); Quasar Great Time Machine VR-1000 (VX); Sony Betamax SL-8600 (slow-speed "Beta II"); Quasar Great Time Machine VH-5000 (4-hr. VHS).



Input signal



JVC HR-3300U



Quasar VR-1000

MULTIBURST PATTERN: The test signal (far left), as displayed on an oscilloscope, represents voltages imposed on the electron beam as it scans horizontally across the picture. The vertical scale of the oscilloscope is calibrated in arbitrary IRE units (named for the Institute of Radio Engineers—now the Institute of Electrical and Electronics Engineers) from 120 at the top of

the scope to -40 at the bottom. The extreme left of the display represents voltages that precede the actual picture scan; the tone burst of ± 20 IRE units centered on the zero reference is a syncing pulse. The "picture" voltages begin with a white bar—the "mesa" rising to approximately 100 IRE units, which represents maximum picture brightness. Then begins a series of

tape as an extension of the normal home TV receiver—the use to which we believe the present equipment and the tastes of the present market are best adapted.

What You Get

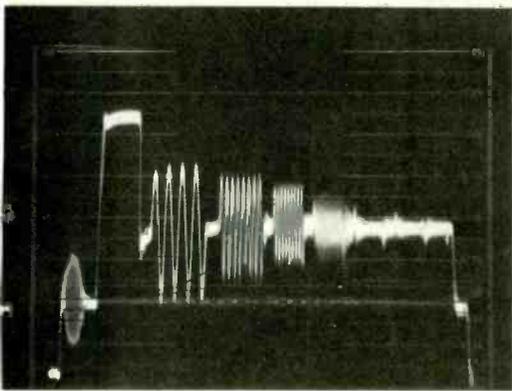
The basic format for home video cassette decks is already well established. There are inputs for VHF and UHF antennas (with options for either 75-ohm or 300-ohm lead-ins, though the preferred hookup favors 75 ohms) plus a set of jacks for a video camera and a microphone. The antenna terminals feed the radio-frequency signals to a front-panel tuner with the usual VHF and UHF selectors plus fine-tuning knobs, which choose the program to be recorded; the antenna input also feeds around this tuning array to make the incoming broadcast signal available at the RF output jacks on the back panel. These jacks feed the regular television receiver, which can operate normally even when the tape deck is turned off but also acts as the monitor for assessing the deck's tuning in advance of recording and for viewing the tape on playback.

In order to perform this last function, the video and audio signals recorded on the tape must be modulated onto a carrier frequency by circuitry built into the deck so that the equivalent of a broadcast RF signal is presented to the receiver being used as a monitor. To allow viewing of an incoming channel while any other channel is being recorded, the deck's output can be modulated at the frequency for Channel 3 or that for Channel 4—whichever is unoccupied by local broadcast signals. Some decks have an easily accessible channel switch for this purpose—though, even with a local cable system that puts signals on each of the

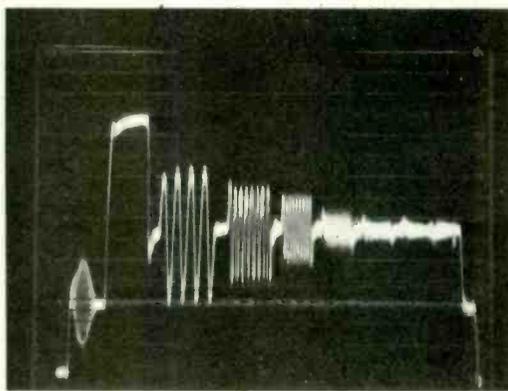
VHF channels, we found that the deck's remaining switches allowed us to get along without this feature. Nor could we combine the outputs from two decks, one switched to Channel 3 and the other to Channel 4, and monitor them alternately via the receiver's channel selector; when we tried, one deck would interfere with the other. Yet we experienced no setup in which the deck output interfered with the broadcast-signal feedthrough on a contiguous channel.

A studio TV monitor does not bother with the RF modulator necessary to adapt the tape's output to the receiver's antenna inputs. Instead the video and audio signals are fed directly to the monitor. Outputs for this purpose are provided on all the decks, but since most households already will have a conventional TV receiver and most deck users will see no advantage in buying an additional set just to monitor the deck's output, the RF outputs seem to be the overwhelming "standard" for home hookups. (The audio could, however, be fed directly to a stereo sound system while the picture is reproduced—via the RF connections—on the TV receiver.) Not so standard are the switching arrangements for feeding broadcast signals through and/or past the tape portion of the deck and thence to the monitor. But while the switching formats may differ somewhat, we find little practical advantage in one scheme over another.

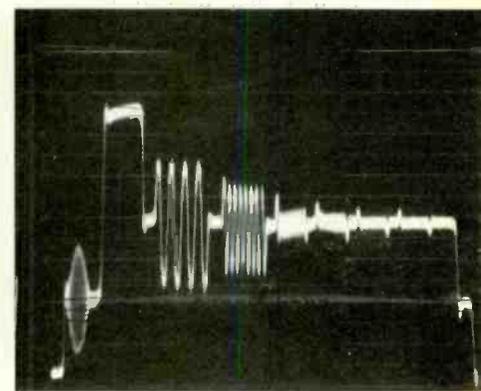
Also fairly standard is the digital clock and the unattended-recording feature that goes with it. The ability to record from one channel while you watch another is a universal feature—and an important one for home use, in our estimation; the ability to record broadcasts that occur while you're away from home strikes us as of approximately equal importance, and even the decks that



Quasar VH-5000 (fast mode)



RCA VBT-200 (fast mode)



Sony SL-8600

"tone bursts" of ± 15 IRE units centered on 40 and increasing in frequency with each burst: 0.5, 1.25, 2.0, 3.0, 3.58, and 4.1 MHz. Though the brightness values generally are displaced downward (which can be corrected for with the brightness control of the set used to monitor the taped signal), none of the decks has any real difficulty reproducing the first of these

bursts, but all show some loss in amplitude by the time the second is reached. Measured amplitudes for the third (2-MHz) burst are shown in the data table. At the higher frequencies, little useful response remains, either because of attenuation or because (e.g. in the Quasar VR-1000) the waveform is subject to fairly drastic alteration.

include no built-in timer system allow for the use of an outboard one. All are strictly AC systems—meaning that if the power goes off, the clock will not function. The outboards will simply lose time for the duration of the outage: If the electricity is off for a half hour, your automatic recording will begin a half hour late. When the power returns to the built-in clocks, however, the digits will reset themselves (to 0:00 hours on the JVC's twenty-four-hour clock, 10:00 a.m. on the others), so there's no telling what time it will really be when the recording starts. A small rechargeable battery to drive the clock's time-telling circuit would solve these problems neatly—though if your electrical supply is reliable, you may not consider this a real problem.

The cassettes differ from the familiar audio variety in three primary respects: They are larger; they include a gate that latches closed over the tape to prevent finger oils and other foreign matter from getting on the oxide while the cassette is out of the deck and causing dropouts when it is used again; they can be recorded and played in one direction only. There also is a fundamental difference in the way the tape is used in the deck: Although the audio head of a VCR is fixed (like that in an audio-only deck), the separate video heads rotate so that the tape-to-head speed is much higher than the tape transport speed itself, and the tracks they record are a series of diagonal "strips" rather than one continuous longitudinal pass. The actual speeds and related parameters differ from one VCR system to another, which is of course what makes them incompatible.

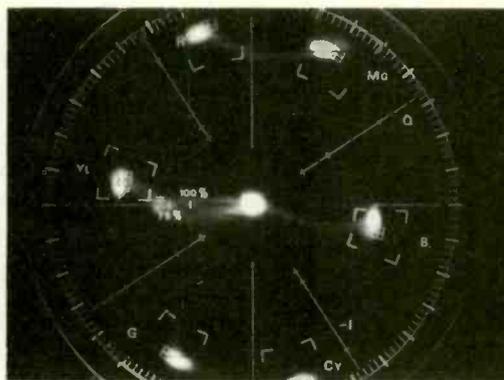
When a cassette is inserted into a video deck and the transport system engaged, the deck unlatches the tape cover and draws a loop of tape out

into the head path, then takes up any slack by winding in both of the hubs. Perhaps because of this complex operation, we found the tape counters (which, otherwise, are very much like those on audio cassette decks) to be relatively inaccurate when the cassette had been started and stopped, removed and reinserted, wound and rewound in some of our trials. For indexing a miscellany of contents, recorded at various times, we would therefore suggest that you wait until the tape is full and then read off the numbers in a single playback. When it's a question of simply using the PAUSE to edit an incoming signal, however, the counters (including their memory rewind features) remain quite accurate. In addition, the successive recordings play back much more smoothly, with only minimal picture disruption at the edit points. So for the inveterate collector who wants, say, all of Beverly Sills's talk-show guest shots on one tape, it's better to collect them on separate tapes and eventually dub them onto a master cassette on a second deck than to drag out one cassette and add to it each time the diva makes it to the tube.

In other respects, the operation of a VCR is very much like that of an audio deck, with one additional exception: There are no meters. The signal levels that reach the tape pass through circuitry comparable to the automatic level controls on many audio decks—except that the audio version generally is defeatable in quality gear. The complexity of video signals pretty well rules out any sort of user-adjustable level controls; in addition, they are all but unnecessary when the deck is dealing with incoming broadcast signals, whose levels are dictated within relatively narrow margins by broadcast standards. Though the carrier level may vary widely from channel to channel, the modu-



Input signal



JVC HR-3300U



Quasar VR-1000

COLOR VECTORSCOPE: Color information is essentially phase-modulated into the composite video signal, and the vectorscope displays the phase information as a circle on which

each "pure" color is represented by a small target: Mg (magenta), B (blue), Cy (cyan), G (green), YL (yellow), and R (red). Though the aim of the various tape systems is neither perfect

lation of the carrier—and hence the signals fed to the tape—cannot do so without either violating FCC rules or compromising the quality of the picture and/or sound in the home receiver.

A Leap into the Future

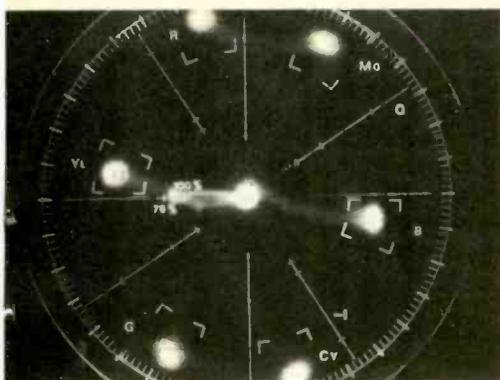
Like most consumers, we were starting at ground zero in this project. We had some familiarity with the equipment, but we had not actually worked with any of it. We were aware that the excellent pictures we had seen demonstrated at press conferences would not necessarily be reproduced in the home under typical operating conditions. And because those conditions vary widely, we realized the importance of asking CBS Technology Center to bench test whatever equipment we would be working with to give us some objective fix on performance. At the same time, we looked forward to the home-testing phase of the project as a learning experience to whose results we had but a few clues.

The first step was to choose models. When, in the middle of last year, we began preparation for this article, three basic home cassette systems were in evidence. The best known, surely, was Beta—né Betamax in Sony's initial and highly publicized models. Then there was what Quasar called the Great Time Machine, a term it now applies to all its VCRs; the original system, now dubbed VX, was devised by its Japanese parent company, Matsushita, but available only from Quasar in the U.S. The third format, introduced by JVC, was known as VHS—for Video Home System. This system was picked up by Matsushita, which added a half-speed option to double record/play time at some cost in picture quality; though playing times are of course dependent on tape lengths, the fast-speed option generally is called "two-hour VHS," the slower one "four-hour VHS." Sony

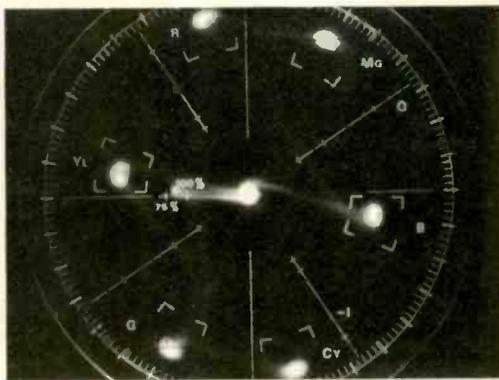
quickly followed suit by adding a similar option to Beta; that "option" now is standard and the higher speed is omitted altogether in current production models.

Other companies, one by one, have adopted either the Beta or the VHS format. (The year-end status quo was outlined in our March issue.) We began requesting samples for editorial coverage. They were not easily acquired, as it turned out. For the Beta format we naturally approached Sony, which eventually supplied the SL-8600. For the original two-hour VHS system we likewise went to JVC; again we scored, with the HR-3300U. By this time, RCA had announced that it would offer the four-hour SelectaVision VHS, using a Matsushita-built transport plus its own electronics; on the day of the announcement we put in our bid for a sample, which eventually was delivered in the VBT-200. And of course we approached Quasar for the VX. It materialized, in due course, as the VR-1000, along with a sample of Quasar's four-hour VHS—the VH-5000, which was introduced only a short time before the deadline for receipt of the samples. Other samples had been requested too, but for reasons that were not always obvious they failed to show even when their manufacturers had expressed willingness to cooperate.

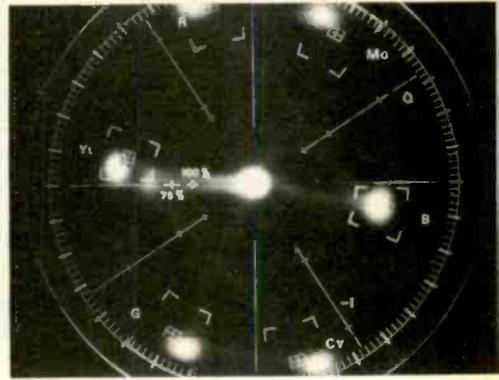
In any event we had a fair initial cross-section of the available home decks. The four-hour VHS format was the only one represented twice (by the RCA and one of the Quasars), but we figured that the comparison between VX and VHS decks made by the same company might turn up something interesting. At the same time, a number of factors were not represented. JVC and RCA, in particular, have since announced equipment with all sorts of sophisticated features not available in the decks we had requested so long before; Sony had sent a one-speed deck, so no documentation of the original (fast-speed) mode would be possible.



Quasar VH-5000 (fast mode)



RCA VBT-200 (fast mode)



Sony SL-8600

(note that the JVC's yellow and cyan dots are almost dead on, while its blue dot, in particular, is somewhat displaced) nor consistent (as exemplified by the considerable blurring in the

These seemed minor considerations to us. We expect that features will change rapidly (a point of view confirmed by the heavily feature-oriented cast of some recent TV advertising for video decks) and that nonavailability in a given format or from a given company will therefore tend to prove temporary. And the Beta high-speed mode appears to be of only academic interest now. While we planned to test the slow-speed mode on those VHS decks offering it, the main emphasis was on assessing the capabilities of the recorders at their best—though we realized that many viewers would opt for the economy of the slower speed. (JVC had, by this time, announced that it would not offer the four-hour option on its VHS decks because it considered the quality compromise too severe.) The slow speed, like other features, is an option that may or may not be of interest to individual readers; the prospective buyer will have to decide which of these “extras” will be of value to him and shop (or wait) for the combination that suits his needs.

An Adventure in Measurement

The five decks were first turned over to CBS for bench testing. The lab tried, as much as possible, to adopt an approach similar to that used in our regular testing program for audio products: Standard input signals whose values are well recognized were to be recorded at standardized levels, then played back and measured to determine how accurately those values had been preserved through the record/play process.

Right off the bat, the dictum that the recording levels were to be “standard” posed a problem. With automatic control of recorded levels in each deck, and with different sorts of signal processing used by each to make its compromises (for example, between noise factors and overload of the

Quasar VR-1000 dots), we found it, in general, surprisingly good. As with the multiburst tests, our in-the-home evaluations generally agreed with the data from the lab.

tape), they presented neither a way of determining what the absolute level on the tape might be nor of altering it to suit any assumed standard. Actually, the video signals posed little problem in this respect since the range over which they may vary is so narrowly circumscribed by broadcast technology; measurements could be made in terms of pure replication, with no allowance needed for any sort of headroom. Broadcast-station limiters and similar equipment aside, however, audio signals are not so circumscribed, and some reference “0 VU” is necessary if they are to be documented. The lab first tried to use the level at which 3% THD was reached (at 1 kHz) as the reference but found that, with most of the decks, internal limiting prevents input levels from going that high; as a result, it settled on 3% distortion or maximum levels, whichever came first.

In making its tests, CBS was concerned lest something other than the tape might prove to be the limiting factor in reproduction quality. In particular, it raised questions about the quality of the RF modulators by which the decks create “broadcast” signals for the receivers’ antenna terminals.

To get answers, they made all the appropriate tests both via the decks’ built-in RF modulators (using a broadcast-quality demodulator to recover the test signals) and via the direct video and audio outputs. In each case, the results were extremely similar; that is, the extra modulation and demodulation steps (in the deck and the TV receiver, respectively) do not materially compromise the signals as compared with the reproduced quality one might expect with a studio-grade monitor system fed from the decks’ direct outputs.

CBS also checked the effects of the electronics, measuring the output signals both via the tape’s record/play cycle and directly via the electronics only, bypassing the tape. The electronics did little to alter the test signals, indicating that the record/

play process is emphatically the limiting factor in each of these systems and that new tape formulations (rather than circuitry) offer the most immediate hope for future performance upgrading. Curiously, some of the electronics-only measurements suggest some signal preconditioning to compensate for expected losses in the tape. Those portions of the video test signals that are comparable to audio square waves, for example, may show some spiky ringing at the initial transients, while the same transients are visibly rounded off by the record/play process. Presumably, therefore, the rounding would be more exaggerated but for the compensatory ringing provided by the electronics.

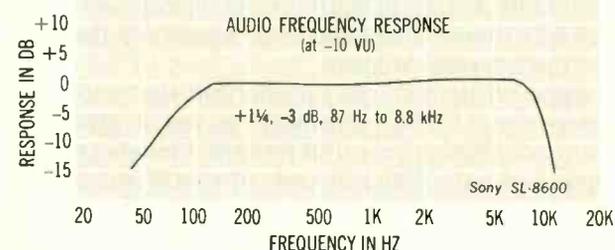
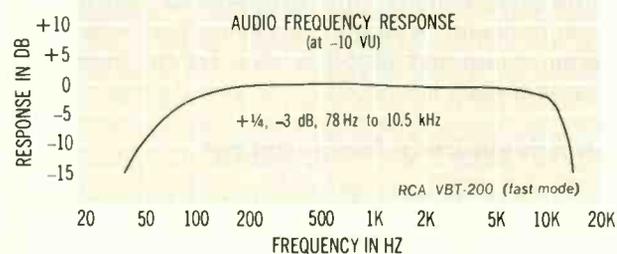
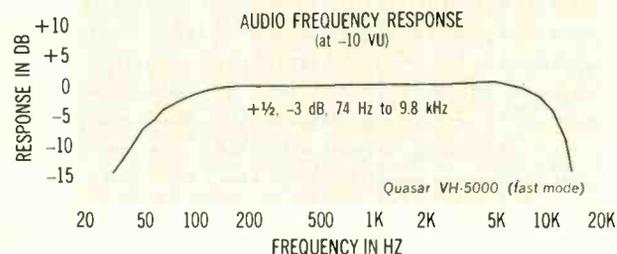
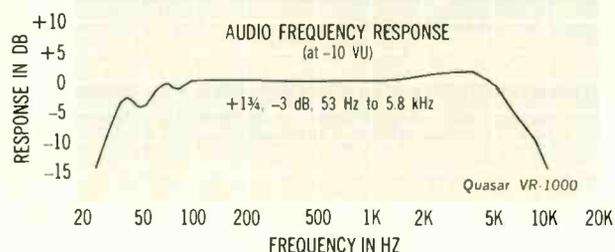
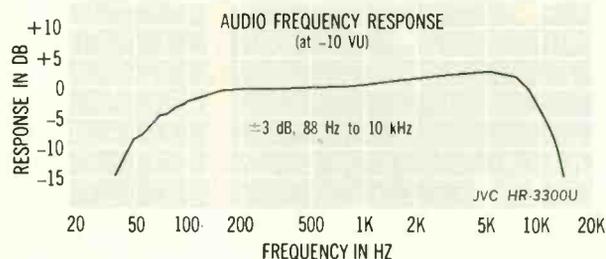
The data and oscilloscope patterns shown here, however, all represent the "normal" function of the deck as we believe it will be used in the vast majority of homes: That is, they are shown through both the record/play process and the RF-modulator output. And, unless otherwise specified, they are shown for the higher transport speed of those decks offering a slow-speed option.

The lab's original plan had been to test each deck with tape supplied by its manufacturer. But TDK also supplied some samples of its SA VHS cassettes, and when RCA's tape sample proved not to be virgin, the lab experimented with SA. It gave excellent results—marginally better than the other VHS tapes. So in the interests both of consistency and of giving the decks their best shots, all the VHS units were measured with SA.

The Video Data

The so-called multiburst signal, essentially a test of frequency response, is a primary measure of picture sharpness. The higher the frequency to which the tape system will respond, the smaller the detail that it can reproduce. The signal itself, reading from left to right on the oscilloscope photo, consists of a sync pulse followed by a white band (the "square wave" rising to 100 IRE units, representing maximum picture brightness—the vertical scale of the display) and then a series of tone bursts (centered vertically on 40 IRE units) of increasing frequency: 0.5, 1.25, 2.0, 3.0, 3.58, and 4.1 MHz.

In an ideal system, each of these tone bursts would be reproduced with the original amplitude; in practice, as the oscilloscope photos show, this is far from true. As a single-number characterization of each deck's performance in this respect, the data show the response of the 2-MHz burst as so many dB down from the original amplitude. In all but one of the decks, the amplitude has dropped significantly by 2 MHz and drops even more at the higher frequencies; that one exception, the VX, recovers in amplitude at higher frequencies, but with such severe alteration of the bursts' wave-



forms that the utility of the upper "response" in preserving fine picture detail is questionable.

The shape of the white-bar "square wave" that precedes the bursts also offers some hints of visible picture quality. Where the squareness of the corners is exaggerated by ringing (typically, a sharp spike at the corner with some waviness in the flat portion to its right), it implies an exaggerated "etched" quality at the edge of the white bar that one would see in the resulting picture; where the corner is rounded, softened edges are suggested. Small departures from ideal squareness normally are difficult or impossible to see in actual pictures, however, because they may be obscured by similar departures introduced by the TV receiver on which the picture is viewed and are easily compounded by even moderate amounts of multipath in broadcast signals.

The vectorscope photos indicate accuracy of color reproduction. Running around the display, clockwise from the "one o'clock" position, are six "targets" representing the additive and subtractive primary colors: magenta, blue, cyan, green, yellow, and red. The central box of each target is the dead-on bull's-eye; if the bright dot falls here, the color may be considered perfect. Outside each box are angles that form the corners of a larger box, which may be taken as the "acceptably correct" area. Displacement of the bright dot away from the

bull's-eye suggests that the color will be altered in reproduction, though equal rotation of all bright dots about the center axis would produce a shift that could easily be corrected by the color controls on a well-adjusted receiver. Blurring of the dots suggests instability of color values in the reproduced picture. Some of these effects can be noted in the vectorscopes, though all represent surprisingly good performance in this respect considering that tape is notably a phase-altering medium and that the color information is phase-dependent.

Another important picture quality test uses a signal that ranges from 0 IRE units (the darkest picture value, or black) to 100 units (the brightest, or white) in five equal steps. This output signal is put through a differentiator that isolates the amplitude of each step, and the resulting signals are measured. In an ideal system, all steps should be identical both to each other in a given unit and to the original input signal, but compression—possibly due either to nonlinearity in the tape medium or to electronic limiting intended, for example, to inhibit tape overload—may prevent perfect equality in all the steps.

Generally speaking, the present models do well in this test. Though compression of a few percent may sound important, its visibility in a given image would be questionable at best. The most brightness compression obviously is supplied by

Lab Measurement Comparison

Manufacturer	JVC	Quasar	Quasar	RCA	Sony
Model	HR-3300U	VR-1000	VH-5000	VBT-200	SL-8600
Type	VHS	VX	VHS	VHS	Beta
VIDEO					
"S/N" ratios					
luminance	42½ dB		39 dB	40½ dB	40 dB
red-field AM	45 dB	(see text)	39 dB	41½ dB	39 dB
red-field PM	39 dB		36½ dB	30 dB	34 dB
Brightness linearity					
step 1	-1.6%	0.0%	0.0%	0.0%	-3.1%
step 2	-0.8%	0.0%	0.0%	0.0%	0.0%
step 3	0.0%	-5.9%	0.0%	0.0%	0.0%
step 4	-0.8%	-11.8%	-1.7%	-4.2%	-4.6%
step 5	-2.4%	-23.5%	-8.3%	-10.8%	-5.4%
Response at 2 MHz	-7¼ dB	-10½ dB	-3½ dB	-5 dB	-13 dB
AUDIO					
S/N ratio	44 dB	30½ dB	37½ dB	37 dB	45 dB
ref. THD (0VU)	3.0%	2.96%	1.1%	1.4%	2.3%
THD (-10VU)	<2.4%, 80 Hz-10 kHz	<3.4%, 50 Hz-1 kHz	<1.5%, 80 Hz-10 kHz	<2.0%, 80 Hz-10 kHz	<3.8%, 80 Hz-8 kHz
Weighted peak flutter	0.22%	0.20%	0.10%	0.10%	0.22%

the VX deck, which reproduces the darker values well but progressively loses ability to differentiate brightness values as they rise toward white. The loss of more than 20% in the highest step should be expected to squeeze some of the sparkle out of the picture highlights. The Quasar and RCA VHS decks both have some mild compression in the upper brightness reaches, none below. The Sony has a bit at each end—as does the JVC, though the latter's is vanishingly small.

Three video "signal-to-noise ratios" are shown in the video data. The luminance figure compares a low-level brightness signal (7.5 IRE units) with the noise on the signal (which, of course, reproduces as "snow"). The lab repeated these measurements at 50 and 100 IRE units; in all cases, the results are similar at the three levels, though the two at higher levels generally deliver slightly better numbers. Obviously there is little to choose between Beta and VHS in this test. The red-field amplitude-modulation S/N ratio documents the degree to which noise elements impinge on color intensity; those for red-field phase modulation, the degree to which noise may affect color purity and stability. Here the differences are somewhat greater, though not pre-emptive. So although the JVC produces the best results in each of these three tests, it can hardly be said to blow the others away.

No "S/N" measurements were possible on the VX because of its unique way of handling the picture. In the American (NSTC) video system, pictures are displayed at the rate of thirty frames per second and each frame is scanned twice—as two fields. The scan lines for the second field of each frame are intended to fall between—to interlace with, in the technical term—those of the first field; the first field may therefore be thought of as consisting of all odd-numbered lines (beginning at the top with 1, 3, 5, and so on) and the second field of the even-numbered lines, filling in between the odd-numbered ones to complete the picture. The VX, however, is a skip-field system: That is, it records only one field for each frame and uses this single-field information for both fields in the monitor. The syncing ability of modern TV receivers being what it is, the picture remains surprisingly stable and detailed considering that the receiver is deprived of half the information normally supplied in a video signal. But the test equipment is less able to cope with the deprivation, making attempts at quantification in the S/N tests too problematic to be useful.

Audio Tests

When we come to the sound properties of the five decks, HF readers should find the going considerably more familiar. Not surprisingly, the response curves and other data all resemble those for regular audio cassette decks—though not the very best

ones, by any means. RCA does the best job of keeping response flat, but none of the curves is as extended at either bottom or top as we would expect in, say, a \$300 audio deck. Still, on the average, they represent more attractive response than you are likely to get in standard TV receivers' audio sections.

And where we often are measuring S/N ratios (without Dolby) of 50 dB or so in audio cassettes, the figures here average about 10 dB poorer. Note that the reference "0 VU" is specified in terms of distortion at 1 kHz, as mentioned earlier. The THD curves measured by CBS for the video decks (at a level 10 dB below that producing the reference level for the S/N tests) are reasonably flat across the midband and rise sharply toward the frequency extremes. The frequencies shown in our data table are those between which the curves remain relatively level, and the distortion figures are the maxima for these portions of the respective curves. In all cases, midband distortion is respectably low; in the VX, however, it begins rising at too low a frequency (1 kHz) for the results to be considered even marginally high fidelity. Flutter is acceptable; indeed it is astonishingly low for tapes that must, perforce, be bombarded by a succession of rapidly rotating video heads.

Home Tests

The raw video data, as delivered by the lab, conveyed relatively little to us, of course, because we had had no opportunity to calibrate our eyes, so to speak. How good or bad was the performance to be expected from the data? The only way to find out was to do some looking.

Our local cable-TV operation presents a variety of programming with fairly high-quality and relatively stable signals, but—like most such cable operations—with somewhat less signal strength than one might expect from a good suburban-area home antenna. We therefore had to take care that the signals going to the decks were at least as strong as that delivered by the cable. We fed the output of our 75-ohm cable system to a coupler so that we would have two outputs and connected each of these to the input of a Channel Master RF amplifier/coupler with four outputs—giving us a total of eight, all at the same level a few dB higher than that of the incoming signal. Five of these outputs went to the five decks, one to our TV receiver as a video monitor, one to a Pioneer TVX-9500 as the audio monitor, and the eighth was simply terminated in a 75-ohm load to keep everything equal.

To compare the results, we hooked the RF output of the deck we were evaluating into one of the Channel Master amps and fed one of its outputs to the TV receiver and another to the Pioneer TV-audio tuner. The resultant signal level at the receiver and tuner antenna inputs was thus several dB

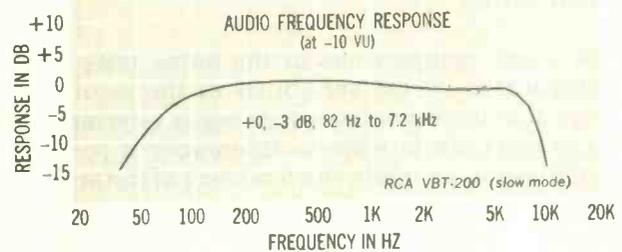
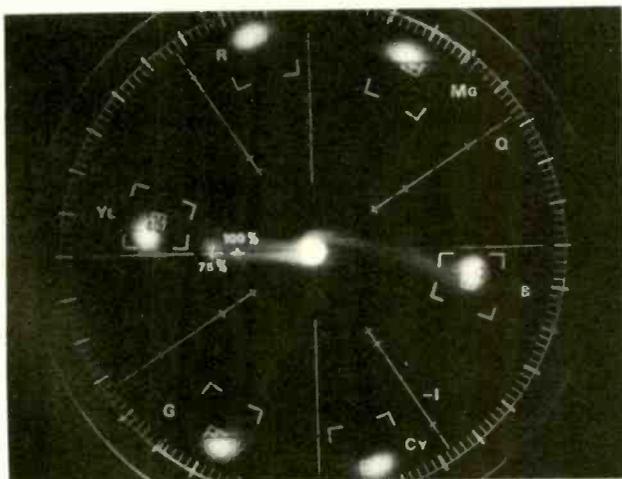
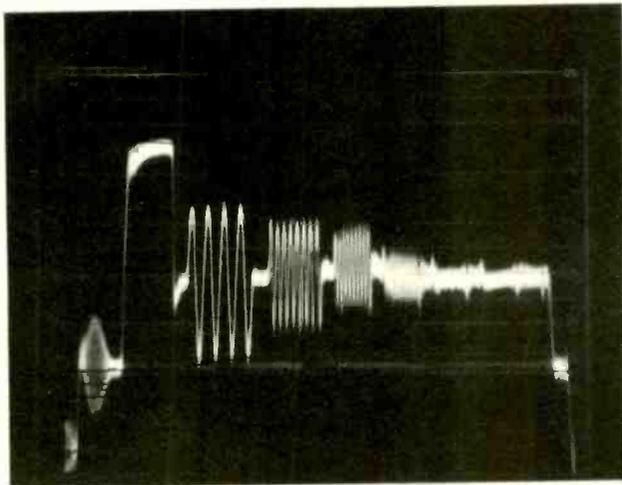
higher than that delivered directly by the decks (generally, to comply with FCC regulations, in the 1-2 millivolt range and therefore comparable to the output of a cable-TV system). This produced somewhat better picture quality with our receiver than the direct hookup (which we also tried), but we felt that the RF amplifier should be kept in the circuit for the tests to help us spot any visible differences in the pictures from the decks. Likewise, use of a coupler (to feed both the receiver and the tuner from the deck under consideration) without RF amplification threatened to drop the input to the Pioneer below its muting threshold, preventing useful audio comparisons.

With this setup (which, incidentally, produced a

consistently better picture on our "monitor" than we're used to getting from the cable with a direct hookup), we were a little surprised to find that all of the decks gave up something in picture quality vis-à-vis the input signal. The losses might be compared to those suffered in dubbing a master tape onto cassette; the copy was—with the best decks—certainly enjoyable and often excellent, but in ways that usually were not difficult to spot it was not the equal of the original. Fine detail was softened; the picture was subject to some jitter where none had been visible in the original; colors—though on the whole admirably reproduced—were subject to some streaking and momentary variability; bending of the image (due to tape skew)

THE SLOW-SPEED VHS OPTION: Here, for comparison with the full-speed data, you will find the lab results when the RCA VBT-200 was tested in its slow-speed (or "long-play") mode. In some parameters there is little change (or even an apparent improvement, as in S/N ratios, where some types of noise may ac-

tually be suppressed by lessened playback capability), though the overall impression—confirmed in our home tests—is of poorer performance. Picture clarity and audio response suffer significantly, color purity (whether displayed on the vector-scope or on the TV screen) unexpectedly little.



VIDEO

"S/N ratios"

luminance	39% dB with tracking control at detent
	41 dB with tracking optimally adjusted
red-field AM	38½ dB with tracking control at detent
	40½ dB with tracking optimally adjusted
red-field PM	35½ dB with tracking control at detent
	37 dB with tracking optimally adjusted

Brightness linearity

step 1	0%
step 2	0%
step 3	0%
step 4	-4.9%
step 5	-9.8%

AUDIO

S/N ratio	37½ dB
ref. THD (0 VU)	1.5%
THD (at -10 VU)	<2%, 80 Hz to 1 kHz
Weighted peak flutter	0.175%

toward the top of the picture could be detected in varying degrees; slight interference moirés and noise specklings could be noted on close inspection. But, again, the overall quality was not seriously compromised by the best of the decks, and with some program material the losses were very difficult to detect unequivocally.

The sound held up as well. Comparison of audio-cassette recordings via the Pioneer tuner with the sound from the video cassettes proved to our satisfaction that there are audible losses in the latter, but with the best of the video decks the losses are not severe: generally a slight coloration plus an increase in hiss. To some extent, of course, the limiting factor in this comparison is in the quality of the broadcast audio signal. Even with the BBC Gilbert and Sullivan productions used in our test—certainly among the better sonics to be had on the tube—some salient shortcomings could be spotted. An era of improved production and transmission techniques for TV audio, should it come, will tax this element of the video decks more sorely than most broadcasts do now.

Who Wins?

We found comparisons in the home tests to be complicated by the variability of the results we were able to obtain from viewing to viewing—not all of them attributable to differences in program material. For example, the tendency of the top portion of the picture to bend—either consistently, to produce a fixed curvature in the tops of vertical lines, or variably, so that those portions of verticals appeared to “wag”—differed from playback to playback, even when the same recording was viewed from the deck on which it was recorded. (The tendency seemed more pronounced, on average, when we tried playing the tapes on other decks, particularly at the slower transport speed—a statement that, obviously, applies only to the VHS group since we had only one sample in each of the other formats.) The most likely explanation for this variability appears to be that changes in atmospheric moisture affect tape stiction, and therefore skew, as the tape runs over guides and heads. At any rate, the variability of results inhibited unequivocal value judgments in our home tests.

Even the data—objective though they obviously are and, with the lab's atmospheric controls, only minimally subject to humidity and temperature effects—must be viewed with some caveats. Different choices (for example, with respect to the assumed reference levels) might alter results enough to reverse inferences based on the present data. Similarly, in the home, a different receiver used as a monitor or different incoming signals strengths or different test program material might likewise lead to different conclusions.

Despite these considerations, we were able to form some conclusions. The VHS decks at the higher speed produced consistently excellent results: at best barely distinguishable from the incoming signal, at minimum of enjoyably good quality. By contrast, the results from the VX sample were not in the same league—often acceptable in quality but consistently much less sharp, stable, and enjoyable in other respects than the sound and pictures provided by the high-speed VHS. In that group we found little to choose among the three models; indeed our rankings often changed from one trial to another. The Beta fell somewhere between the two groups; the best we were able to get from it was not the equal of the VHS's best, but it generally outperformed the VX. The greatest variability, perhaps, was in the slow VHS mode: astonishingly similar to its high-speed performance at some times, roughly comparable to that of the VX at others.

In view of the potential limitations at the lower speed, we believe that those who are fussy about technical quality (and we would expect readers of HF to have high standards in this respect) will prefer to use the higher VHS speed for any program material that is to be saved as a library item, so to speak. And from the same point of view, we tend to regret the omission of Beta's former high-speed mode, however small the quality differences between its two speeds may be.

That is not to say that we agree with JVC's decision to avoid the slower VHS speed. Even ignoring the doubling of tape costs at the higher speed, the doubling of recording time in the “long-play” mode is a powerful argument in its favor. And in general the quality compromises it entails are less than one might expect in trying to receive a weak station—for example, in pulling in from a distant station a ballgame that is blacked out locally. Under such circumstances, where it is a question of receiving a marginal image vs. receiving none at all (or, at minimum, recording only the first portion of the program), the choice appears clear. In a word, we'd like to see both speeds remain.

Where tape-swapping may be desirable, we found the three VHS decks more interchangeable than we had feared but less so than would be ideal. Again, it seemed to us that results were more consistent at the higher speed; we generally found the results to be acceptable at either speed when a different deck was used for playback, but less satisfactory than when the same deck was used for both recording and play. In these and similar tests, we tried to compensate for any imperfections in the picture by using the tracking controls built into the decks—which in theory should help adjust for a tape recorded on another deck. While the lab documented some improvements that could be effected at slow speed by readjustment of these con-

trols, we found their influences slight in practice. In no instance would they banish a shortcoming we were seeking to overcome, though in some they managed to reduce it a little.

We found the VX's controls the least flexible and handy of the five, perhaps because those of the other decks more closely resemble the lever systems of audio decks with which we're so familiar. When you add to this the greater storage bulk of VX tapes (actually the Beta's are, by a small margin, more compact than those for VHS) and the more sprawling proportions of the present VX deck—to say nothing of its technical limitations—it

seems the weakest competitor on every count we can think of.

But we must return to the lab's tests for a final word. Since the data seem to show so clearly that the tape, rather than the electronics or the transports, is in every case the limiting factor in most respects, we wonder whether future formulations too may not alter our tentative rankings. Presumably they will not, since a tape improvement in one format should be applicable with comparable success to the others; but in this wonderful world of future shock, dogmatism can lead to unpleasant surprises. ■

VIDEO CASSETTE DECKS: The Features to Look For

The accompanying article discusses the basic deck mechanisms and features that have come to be regarded as standard equipment, but it points out that additional features will be of considerable importance depending on the habits and desires of the individual purchaser. In view of the rapid upgrading that VCR features are undergoing, we have divorced the basics from what might be called the frills; here are some of the salient ones that you should consider in advance of purchase.

Automatic Timer Recording. An almost-standard feature, the built-in clock/timer permits recording while you are away from home without using an outboard timer. We consider this an important feature and suggest that, even if a deck that interests you doesn't have it, you make sure any model you buy can, at minimum, be used with an add-on timer. At this writing, at least one built-in timer will both start and stop the recording. RCA's latest model includes a programmer that will select a week's worth of start/stop recording—including channel changes—though of course the maximum accumulated recording time remains fixed at four hours. Some built-in timers have luminous digital readouts with an element that flashes every second, which some users may find insistent and annoying in their living rooms.

Remote Pause. The PAUSE on the decks we tried permits rapid start and stop and can be used for quasi-editing; the action is comparable to that of audio cassette decks, though VCR "edits" are easier to detect in playback. The PAUSE thus is desirable for such operations as editing out commercials while the broadcast you are recording is in progress. The REMOTE PAUSE allows you to do this from normal viewing position across the room without running long RF lines between the deck and the TV receiver.

Audio Overdub. This feature—which allows you to erase and re-record the audio track without affecting the video—is of little importance if you record only broadcasts. But since photographic services already are offering video-tape dubs from customers' slides (which, of course, are normally delivered with no recorded audio track), it may become more useful in future. For the user who harbors any intention of applying the deck to "home movies," it would seem to be near-obligatory.

Slow-Speed ("Long-Play") Option. A useful feature, in our opinion; see the main article for some discussion of the pros and cons. In both of the two-speed decks we have tried, the

speed control operates only during recording; speed adjustment is automatic during playback.

Automatic Shutoff. Most of the decks we tried return to the STOP at the end of playback, recording, or the fast-wide modes the way quality cassette decks do. Almost incredibly, the VX sample we worked with does not—leaving you, for example, with the impression that rewind is still in progress (because the lever remains depressed) after the tape has stopped. You can waste a lot of time that way; look for the automatic STOP.

Switchable Playback-Output Channel. We see no reason why this feature should cost much, and many users may find that it will sometimes solve logistics problems of deck use. The VX alternative of separate plug-in RF modules for each channel (at extra cost if you want both) seems cumbersome and expensive.

Stop-Frame Playback. This certainly will be more attractive to sports fans and to camera/mike home recordists than to run-of-the-mill viewers. Ready availability of prerecorded educational materials may further enhance the desirability of this make-up-your-own-mind feature. The demonstrations we've seen so far often suffer from a noise bar in the picture.

Slow-Motion Playback. At least one company has this feature in the lab, though admittedly there are problems that remain to be solved before it can be offered in production models.

Memory Rewind. While virtually standard, it rates mention here as an alternative to stop-frame and slow-motion play. Whether you want to analyze your backswing or determine whether the runner was indeed tagged before he touched the plate, the MEMORY can be almost as useful in allowing repeated playings of a given bit of tape. It's also useful in setup or troubleshooting because it allows quick, accurate rewind to the head of what you've just recorded for instant viewing. As the article suggests, however, in more elaborate operations we find the counters (off which the memory works) of video decks less reliable than those in audio decks.

Fast-Motion Playback. This is sort of a CUE feature in that it allows you to go through a tape quickly, looking for a particular element that you might want to examine at normal speed or replace with a new recording. In the form in which JVC has demonstrated it, an attempt is made to correct the audio pitch for the increased transport speed. The result is more useful than enjoyable, and—again—even the utility will depend heavily on your viewing habits and tastes.

PANIC

IN THE

PACKING ROOM

OR

Stop the Lathe, I Want to Get Off!

The Sheffield Records Story Firsthand

by Nancy Pope Mayorga

MY NAME is Mother Sheffield. Doug Sax gave it to me. He put his arms around me affectionately, and he said, "Mother Sheffield." But you don't fool around with Mother Sheffield anymore. No amount of affection or sweet talk could ever again lure me down that flowery path to fame and fortune.

Blame it on mother love, of course. Around 1970 my son Lincoln produced a few classical records. On the labels he put the name Sheffield, which was the name of the street at the bottom of our hill. He thought it was a nice name. When he was touring England with the Ketty Lester troupe, he took a snapshot of the Sheffield town hall tower. It became his logo. He had done a little advertising and was getting occasional orders, which, because he was so busy as a pianist, would lie on his desk for months. I felt sorry for these people who had to wait so long for their records and asked, "Why don't you let me take over the orders for you?"

"Would you, Mother?"

"Sure. It will give me something to do."

They amounted to one or two records a week. At the Montecito (California) Post Office, I told the postmaster, "It's my son's hobby."

He said, "It's good for you to have something to do." Ha!

In the meantime, Lincoln and Doug Sax, his friend from junior high school days, were fooling around with something they called "direct-to-

disc," or "d-to-d." They managed to come out with one record, Sheffield S-9 ["Lincoln Mayorga and Distinguished Colleagues," an eclectic collection of popular music that now brings as much as \$350 from collectors]. They thought it was very good. They immediately faced the problem of distribution. Some people at the Marantz company listened to it and said they would like to send it to their high fidelity dealers for a demonstration record. They bought 2,000 at \$2.00 apiece—a fabulous sum of money! With the records went order blanks, just in case the dealers needed more.

The first I knew of all this was when these little slips began filtering in to me. All at once I was packing eight and ten records a day instead of two or three a week. I called up Doug in Los Angeles and said, "You better send me more of those S-9s." I called up Linc and said, "You better send me some packing material. I can't spend all day cutting up pasteboard boxes from the market. I'm getting blisters."

Overnight the order blanks began coming in a small avalanche. It seemed that everyone who bought equipment from Marantz wanted the record. And everyone's friend who heard it wanted it too. They wrote extravagant things like, "Hurry, hurry! I'm dying!" And I hurried as much as someone approaching seventy can.

At that time I was packing records in an upstairs bedroom. Using the upstairs room was terribly



inconvenient, since the S-9s were downstairs in the playroom. I would take them upstairs, wrap them, and take them down again to the car. Eventually it dawned on me that it would be easier to pack downstairs, where the records were. Even so, soon I was staggering out to the car with large, heavy boxes, and it occurred to me that a small hand truck might help. The first time I rolled it, loaded, into the post office, my friend behind the counter raised his eyebrows and said, "This is a helluva hobby!" It became his daily remark, and I got tired of it.

My original business system, if you can call it that, began to be outpaced by this flood of orders. The only books I had ever kept were check stubs. Linc and Doug, way down there in Los Angeles, were too busy making a living and trying to produce another d-to-d to worry about what I was doing in Santa Barbara. I was completely on my own. But I felt that the boys (I still thought of them as junior high school boys) ought to have a quarterly report of sales. On a sheet of paper I made two columns, headed "in" and "out." In the "in" column I listed all the bank deposits, together with the original bank balance; in the "out" column I listed all the checks I had written, with the current bank balance. After three or four tries, I managed to get them to tally. My difficulty with addition, as the columns grew in length, led to the purchase of an adding machine.

But when the "in" column began taking up three pages or more, I realized there must be some sort of deficiency in my bookkeeping system. I confided in Lincoln, who came up from Los Angeles one morning with a CPA. I showed the man my papers. He said, "In? Out? What's this?"

I explained it to him: "This is the money that comes in, this is the money that goes out, this is what's in the bank, and they balance."

"I see," he said, stunned. "It seems to work." He gave me a peculiar look.

Two good things came out of that meeting. Lincoln gave me permission to hire a part-time packing boy, and the CPA whispered in Lincoln's ear that I needed a bookkeeper.

Slowly it was being impressed upon me that I had a job. No more of that hobby nonsense. I didn't need a job, and I didn't want it. But in all fairness I think I should mention that the job had compensations. I had started at \$1.00 an hour. They raised me to \$3.00. And with the advent of the S-9, my pay went up from something like \$4.00 a week to \$24 dollars a day, sometimes \$30. I usually worked Saturdays and Sundays too, but I didn't charge them for that. I didn't even tell them, because I was afraid Linc would worry. Anyway, the real compensation was the fun—the people who called me from all over the country and up into Canada, just to talk about high fidelity, just to tell me about their equipment and what our record meant to

AN F58 TWEETER WITH A
324 SELIG WOOFER AND AN
IRONTON 424 AMPLIFIER,
WHICH I HAVE HOOKED UP TO.



them: "I have 800 records and only one I can play on my system" or "You have ruined my record library for me. I only play your S-9. When is the next one coming out?" It was unbelievable that there was only one direct-to-disc record on the market—only one. Ours.

Some of my phone pals discovered that the business was in my house, and they would call me up at breakfast time or after dinner so as to have more time to tell me about their high fidelity sets. They said things like, "I have an F58 tweeter with a 324 Selig woofer, two Adder speakers, and an Ironton 424 amplifier, which I have hooked up into an 82½ BTM Mirroflo sound system." Anyway that's what it sounded like to me. I had just one answer to all this. From the depths of my ignorance I would say, as enthusiastically as I could, "It sure sounds like a remarkable setup!" This seemed to satisfy them. Then they invariably added, "But I have only one record I can play on it." It seemed to me I was laughing from morning till night. One of the most heartwarming remarks was from a man who said, "In the evening my wife and I light the fire in the fireplace, pour two glasses of white wine, and put your S-9 on the turntable."

Soon I had real trouble. Word somehow got around that there was an S-10 in the making. Our hundreds of customers began pressing checks upon us for future orders. I had not yet learned the dangers of back-ordering (especially with a book-keeping system like mine), and I deposited check after check against future deliveries. My back orders were weighing on my mind as well as on my desk. I began urging the boys to hurry with the S-10. But it seemed there was no hurrying a direct-to-disc recording. You must take time, or you com-

promise quality. The boys became a little annoyed with me, and I felt they didn't understand my problem. The back orders continued to pour in. I was using that money to pay bills. This bothered my New England conscience. I had my first attack of hives.

Finally the S-10s came out. The pile of back orders began to dwindle. But, horror of horrors! People thought it was better than the first record, and we had a tidal wave of orders. I was panting. My packing boy, Tom Williams, who was studying at Westmont College to be a Baptist minister, was unflappable. "We can only do so much," he said calmly, "and if they have to wait, they'll be happier when they get it." He hunched over the typewriter, made out bills and labels, took phone orders, packed, stacked the records in his van, and went off to the post office. When I went to his graduation at Westmont, I cried real tears. He was thoughtful enough to find me another boy and train him before he left.

In the midst of all this came another anxiety—foreign orders. The first came from Germany. Not so bad. He had a representative in the U.S. who told me exactly what to do. The next came from Canada, which requires export-import papers in quintuplicate. Canadian customs officers don't allow any mistakes or crossouts or write-overs. You have to do it perfectly. Believe me, this is a real accomplishment with two fingers and a Smith-Corona portable.

Then Australia—same thing. The Australian dealer asked me not to use a broker, to do it myself. This was actually the first I'd ever heard of a broker. One night the phone rang, and it was Sydney, Australia. I couldn't believe it—the other side of the world and even a different day! (Earlier or later, I wasn't sure.) But I was soon brought back to the present: "Mrs. Mayorga, where are the papers? The records are sitting on the dock and no papers!" I didn't know where the damned papers were. I had sent them. I said that all I could do was make out another set and send them air mail special delivery. He was somewhat mollified by my voice, and he mentioned rather offhandedly, "Well, we're having a postal strike here. Maybe that's holding them up." I was furious at him, and I didn't sleep that night. Later he came to this country and apologized profusely, and we became good friends.

When I look back on those days, I think it remarkable that Linc and Doug trusted me. I don't mean with money. I am honest to the fraction of a penny. But this was their business, which I was running with no experience and no business sense whatever. Of course, they were as inexperienced as I was. And none of us had any idea how fast and how huge the business would grow. To me it was frightening. I had periods of frantic paper-shuffling at my desk. I had more than occasional at-

tacks of hives. And I couldn't afford to be sick, the orders piled up so fast—like when a boat is leaking and you stop bailing for a minute to catch your breath, but the water doesn't stop just because you do. You have to work twice as fast just to keep up.

Once in a while Lincoln came up to Santa Barbara, but he wasn't any help to me. He really didn't know anything about the business. Or Doug would call me: "Hiya, sweetie! How are things going? Having fun up there?"

I would say sternly, "Doug, running this damned business is not my idea of fun."

"You're doing fine," he'd say. That was all he knew.

Fortunately, my relationship with my bosses was fine. Part of the reason for that was that I didn't see them often. Part of it was because I loved them both. I loved Doug when he played the trumpet in the junior high school orchestra, and I love him now. But I have to mention that, along with his great charm, he has a slightly warped sense of humor. For example, one morning he called, saying, "Hiya, sweetie! How are you doing with the S-10s?"

"They're selling like hot cakes. I was just going to call you and ask you to send me some more."

"Well, Nancy, I have bad news for you. What you have on hand is all you're going to get."

I was panicked. "What do you mean?"

"We lost a few stampers, and that's the end of the S-10s."

"Doug! Does Lincoln know?"

"Of course he knows."

"What am I going to do? How can I write all these people and send back their money?" And perhaps I didn't even have enough money!

"You'll manage," he said cheerfully, and hung up.

I called Lincoln in a tizzy: "Linc! What about the S-10s?"

"What about the S-10s?"

"Are they all gone?"

"Of course not. We have lots of them."

"Doug said some stampers were ruined and there are no more."

"He was kidding you."

I still had doubts. "Would you know?"

"Of course I'd know. We have plenty on hand and plenty to come. He was just kidding. That's his way."

His way! I hung up, and my rage was a ball of fire in my breast. I am not a vengeful woman. At the same time, I knew what I had to do, and I was smart enough to bide my time for the right moment.

It came. One morning Doug called and said, "Nancy, will you send me a check for \$500?"

I said, "No."

"No? What do you mean, no?"

"I mean, no check."

"But Nancy, I need that money!"

"I'm sorry, but up here I just take in money. I don't give any out."

"It's our money!" He sounded a bit frantic.

"I know that, but I'm in charge of it, and I'm not letting any of it go."

"But I have obligations! What am I going to do?"

"You'll manage," I said, and hung up. I fell back on the couch and laughed until the tears rolled down. Then I composed myself and waited for the phone to ring. It would be Lincoln.

It was. "Mother!"

"Hello, dear."

"Send Doug a check for \$500!"

"Okay."

"Send it right away. Today."

"All right." Then I laughed.

"Mother! It is not funny!"

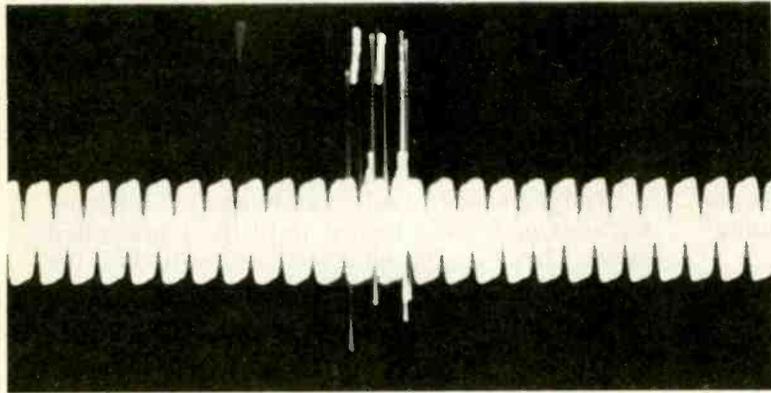
Well, the fact was that the job was too much for me and it was making me sick. And depressed, too, because I thought I was indispensable, and I saw no way out for me, ever. Only the grave, and that couldn't be far off. I didn't tell Lincoln. I didn't want to worry him with a problem that had no solution. It was a dear friend who noticed and told him. Linc was startled and upset. He immediately said to Doug, "I want my mother out of that job. And I want her to have her house back."

And so it was over. Miraculously. Overnight.

Sometimes I go down to the office on Coast Village Road. I look over their electric typewriters, their intercom system, the coffee machine, the duplicator, the computerized bookkeeping system, the postage meter, the company van. I listen patiently to their summary of research and development, their plans for finer and more innovative equipment, and for the new recording studio to hold it. Then I announce to those seven people who took over my job, "I'm going for a walk on the beach."

It's so good not to be indispensable. It's so good to be Mother Sheffield—emeritus. Here I am, at my age, on the beach, laughing. ■





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Rounding Out the Britten Legacy

Works written after the composer's
1973 illness are featured
in a crop of releases from London,
Columbia, and Hessound.

by David Hamilton



Benjamin Britten in 1974

DECCA/LONDON SURELY has reason to be proud of its service to the music of the late Benjamin Britten—a service to posterity as well. Of his more than ninety numbered works (a few were withdrawn from circulation), about half were recorded in performances by the composer (as conductor or pianist). A couple of dozen more are also in the Decca group catalogs, performed in many cases by the artists for whom they were written.

Moreover, these are in very large part superb performances, which give every evidence of having been recorded under optimum circumstances, as has not always been the case with composer performances. (Consider the case of Igor Stravinsky, who may not have been as efficient a conductor as Britten but whose recordings would have surely been much better had they not been skimped and hurried, for reasons that will probably seem pretty silly fifty years from now.) If you remember that Decca's Britten catalog includes ten operas and the three church parables, the scale of the financial commitment will become apparent. (*Gloriana* was unfortunately never recorded, nor Britten's arrangement of *The Beggar's Opera*, while the early *Paul Bunyan* was only revised and made available for performance in 1974.)

Before us now is the autumnal harvest of this bounty. Not the final installments, however, for several of Britten's own recordings have still not been issued in America. Since they may not be, here are the British numbers: SET 445 contains two strikingly contrasted works for children, *The Golden Vanity*, Op. 78, and *The Children's Crusade*, Op. 82; on SXL 6608 are the moving song cycle *Who Are These Children?*, Op. 84, and the Fourth Canticale, Op. 86. Two works from the years preceding Britten's illness in 1973 have not yet been recorded: an overture, *The Building of the House*, Op. 79, and the Third Suite for Cello, Op. 87.

During his convalescence, Britten worked his way back into composition by first revising a number of early works, including a 1931 String Quartet in D (recorded by the Gabrieli Quartet on English Decca SDD 497) and the aforementioned *Paul Bunyan*. The first new work of this period is the Fifth Canticale, Op. 89, completed in July 1974, which takes the diminutive implication of its title more literally than any of its four predecessors. The medium is tenor and harp, the text *The Death of St. Narcissus*, an early T. S. Eliot poem that remained unpublished until 1967, presumably because its opening stanza had been pillaged for use in *The Waste Land* (lines 25–30).

In his notes for the recording, Donald Mitchell points to Britten's frequently original and sympathetic writing for the harp as an orchestral instrument, and this same disc includes the solo suite written in 1969 for the Welsh harpist Osian Ellis, in which a surprising range of musical characters is coaxed from that frequently stereotyped instrument. In the canticale, it takes on the role of accompaniment in more subdued fashion, without sacrificing its distinctive colors. *The Death of St. Narcissus* is a spare, austere work, the harp's occasional touches of acrid glitter finding echoes in the drier tones of Peter Pears's voice to suit the desert landscape of the poem, the torrid martyrdom of the saint.

The *Suite on English Folk tunes*, Op. 90, completed in November 1974, takes up a short piece written in 1966 for the opening of London's Queen Elizabeth Hall and adds to it four similar movements. In each, two folk-

songs or dances furnish the melodic material, though only in one case is the original tune presented in complete form. The outer pieces are for full orchestra, the inner three for smaller ensembles. A subtitle, "A Time There Was . . ." is drawn from Thomas Hardy: "A time there was . . . when all went well." The message of this piece seems to be that such a time is no longer, though the pessimism implicit in the pungent orchestral colors and harmonic clashes is perhaps inflated by Leonard Bernstein's rather self-consciously "grand" performance. A more idiomatic recording, say from the English Chamber Orchestra, would be welcome, for the New York Philharmonic's playing here is not distinguished, the string tone especially hard and inappropriate.

Early in 1975, Britten completed *Sacred and Profane*, Op. 91, a selection of eight medieval lyrics set for unaccompanied voices. These are small miracles of contrapuntal virtuosity and harmonic sensitivity, brief but often powerful in their alternation of piety, rusticity, seasonal concerns, and—to conclude—pawky humor about death. They aren't easy to sing, and the Wilbye Consort does a terrific job with them, one voice to a part. In the Yale Concert Choir's performances—in Hessound's two-disc "Memorial Concert"—full chorus alternates with solo voices, and this works rather well; and if the soloists here aren't quite at the level of the English group, the full chorus is remarkably good, and its ampler tone lends scope to the work.

The next work was a gift (*hansel*, in Scots) for the Queen Mother's seventy-fifth birthday, and it acknowledges her Scots ancestry in its use of Robert Burns poems. Genial and lightweight, *A Birthday Hansel* once again matches tenor and harp, for the Pears/Ellis duo. Rather more than in the canticle, the tenor's persistent quaver is troublesome; for all of his still evident artistry (he was sixty-five when the recording was made), the effort of controlling the voice detracts from the intended effect.

Phaedra, Op. 93, was written for Janet Baker—a "dramatic cantata" after such models as Handel's *Lucretia*; the text for the Greek queen's monologue is assembled from Robert Lowell's translation of Racine's tragedy. Two recitatives, accompanied by harpsichord and cello, separate longer movements scored for string orchestra and percussion. The music's energy, held under tight control in the fragmented instrumental phrases, the dry drumbeats, the needlepoint of the harpsichord, flashes out in the intensity of Baker's declamation and in a few dynamic climaxes. Despite some suspect intonation from the soloist, the performance is strong and effective.

In a sense, the best is still to come. After *Phaedra* was finished, in August 1975, Britten began a string quartet (the third of his numbered quartets). Finished in November of that year, it was first played after Britten's death, in December 1976, by the Amadeus Quartet: one hopes that a recording will come along soon, for this is the most extensive and eloquent of the late works, and any definition of the composer's final period will have to take it into account.

Obviously, most of these recordings recommend themselves, with the reservations already noted. The Pears/Ellis record includes three "encores," and the Wilbye Consort throws in several early choral works (if you don't yet know the delightful 1944 *Shepherd's Carol*, be sure to look it up, on this or another of several

recordings). The *Prelude and Fugue* (1943) is also welcome, in a 1971 composer-conducted recording that has evidently been waiting around for a coupling. Bernstein gives us the familiar Peter Grimes orchestral excerpts; though the Philharmonic's tonal quality is no more winning here, the approach at least does not overwhelm this music.

The Hessound set preserves a concert given in New York's St. Thomas Church on the first anniversary of Britten's death. As well as *Sacred and Profane*, it includes the first domestic recording of *Voices for Today*, a 1965 United Nations commission for chorus and optional organ accompaniment (used in this performance). The opening section uses brief thoughts from a bevy of philosophers and poets, and the rest is occupied with large chunks of Vergil's Fourth Eclogue (the one about the child whose birth will usher in a new golden age—widely misinterpreted in the Middle Ages as a prophecy of Christ): a characteristically proficient occasional piece.

The other works in this set are familiar from other recordings—some of them frankly better—but the Yale choir and the Greenwich Choral Society do fine work and the whole makes an attractive conspectus of Britten's choral (and organ) music. (The *Gloriana* dances are here performed with the introductory lines for solo tenor, as in the opera; these were omitted on earlier recordings.) A strong sense of occasion is conveyed, especially at the end of each half, when the congregation joins the choruses in the hymns featured in *St. Nicolas* and *Noye's Fludde*, reminding us of Britten's intense involvement in music for everyone; for this we can easily forgive the occasional intrusion of noise from the outside world (though I am less disposed to forgive similar sounds in London's recording of *Sacred and Profane*—a problem that afflicts other of their recordings made in All Saints Church, Petersham).

All these records include texts, and a modern paraphrase of the medieval English of Op. 91; many of us would have welcomed some glossing of the Scots dialect of the Burns poems as well.

BRITTEN: Suite on English Folk tunes, Op. 90. Peter Grimes: Four Sea Interludes, Op. 33a; Passacaglia, Op. 33b. New York Philharmonic. Leonard Bernstein, cond. [John McClure, prod.] COLUMBIA M 34529, \$7.98 (SQ-encoded disc). Tape: ♣ MT 34529, \$7.98.

BRITTEN: Instrumental and Vocal Works. Various performers. [Ray Minshull, prod.] LONDON OS 26527, \$7.98.

Prelude and Fugue, for eighteen-part string orchestra, Op. 29 (English Chamber Orchestra, Benjamin Britten, cond.). *Phaedra*, Op. 93 (Janet Baker, mezzo-soprano; English Chamber Orchestra, Stuart Bedford, cond.). *Sacred and Profane*, Op. 91; *A Wealden Trio*; *Sweet Was the Song*; *The Sycamore Tree*; *A Shepherd's Carol* (Wilbye Consort, Peter Pears, cond.).

B **BRITTEN:** Works for Voice and Harp. Peter Pears, tenor; Osian Ellis, harp. [Michael Woolcock, prod.] LONDON TREASURY SR 33257, \$3.98.

A Birthday Hansel, Op. 92. *Canticle V, The Death of St. Narcissus*. Suite for Harp, Op. 83. *Gloriana*. Second Lute Song. Two Scottish Folksongs (arr. Britten): *O can ye sew cushions? Ca' the yowes*.

BRITTEN: *A Memorial Concert*. Various performers. [Richard L. Hess, prod.] HESSOUND S 1001/2, \$15.96 (two discs); also available for \$12 plus \$1.50 shipping from Hessound, 111-31 78th Ave., Forest Hills, N.Y. 11375).

Fantasia for St. Edmundsbury (1959). *Voices for Today*, Op. 75 (Manhattan Chorus, Daniel Paget, cond.); *Boys of St. Thomas Choir*, Gerrie Hancock, cond.; *Hymn to St. Cecilia*, Op. 27; *Sacred and Profane*, Op. 91 (Yale Concert Choir, Jon Bailey, cond.). *Missa Brevis in D*, Op. 63 (Boys of St. Thomas Choir, Hancock). *Prelude and Fugue on a Theme of Vittoria* (Thomas Strickland, organ). *Gloriana*: Choral Dances (James MacDonald, tenor; Festival Chorus of the Greenwich Choral Society, Richard Vogt, cond.).

New Light on the Baroque Era

Vittorio Negri and Philips launch
a series of Vivaldi's sacred works
with an irresistible blend
of great music and
exemplary presentation.

by Paul Henry Lang



Vittorio Negri

THIS IS ONE of those rare recordings of "old" music where everything is just right—the music is great, the performances superlative, and the engineering flawless. The title promises the complete sacred music of Vivaldi; this album contains Vols. 1 and 2, perhaps a rather grandiloquent description since there are only two discs in it, but they are worth the price of several thick albums. These are sacred works for the big Venetian apparatus, soloists, two choirs, and two orchestras. Three of the numbers were already available domestically: the Kyrie on RCA Gold Seal AGL 1-1340 and on Archiv 2533 362 (and also on RCA Red Seal), *Beatus vir* on Orion ORS 75208 and on Hungaroton SLPX 11695, and *Lauda Jerusalem* on that Hungaroton disc; the other works, sumptuous and fascinating, are new to the catalog.

The *Introduzione* to *Dixit Dominus* has two Allegro movements, virtually little concertos for soprano, which Margaret Marshall sings with verve and an attractive, shining voice. At the opening of the piece one is momentarily startled by its resemblance to Bach's E major Violin Concerto.

The *Dixit Dominus* itself is a tremendous work, Vivaldi at his expansive best in the grand style; this is the opulent High Baroque, and one can fairly see the festive crowd at St. Mark's in Venice (even though it is not known whether it was actually composed for the great basilica). It is a large work in ten sections, each different in mood and in the forces used. No. 2, with its impassioned choral ejaculations over a heavily pulsating bass, is overwhelming. No. 3, for two sopranos and the double orchestra, has a capriciously fantastic texture. No. 4 is a quiet soliloquy for contralto, but in No. 5 a tonal avalanche announces "*Juravit Dominus*," followed by a splendid choral fugue, "*Tu es sacerdos*." No. 6, for tenor and bass solo, is like a double concerto; unfortunately the fast roudades prove to be too much for tenor Anthony Rolfe Johnson, though bass Robert Holl valiantly holds his own. No. 7 opens with trumpet fanfares; then the choirs fall in majestically with "*Judicavit*," a highly dramatic piece, followed by a soothing solo for soprano. No. 9, the "*Gloria patri*," and the following fugue, "*Sicut erat*," are again blazing; the choral writing would earn a plaudit from Handel himself, and the profusion of ever new ideas, themes, and counter-themes over the throbbing orchestra forms a rich tapestry. The work ends on a dazzling pedal point.

The eight-part Kyrie has been well recorded before, but this performance tops even the excellent Archiv edition I reviewed in July. The composition is magnificent, with its shifting choral harmonies relieved by gently colliding dissonances as the parts begin to move independently. There is an underlying sadness in the first "Kyrie." The "*Christe eleison*," though allegro and in the concertato manner, is tender and supplicating, and it is also very demanding in choral virtuosity. The second "Kyrie" is a great fugue; this time the tone is positive and jubilant, and once more the choral writing is extraordinarily smooth yet virtuosic.

Beatus vir is also known, but again this performance is superior, excellent as the Hungaroton recording is. In No. 3, a vocal concerto for two sopranos, the soloists sing the garlands with ear-catching virtuosity, as the piece was undoubtedly originally sung by those incredible girl artists at the Pietà. In No. 4 the voices rise one after the other ("*Exortum est in tenebris lumen*") with an ineffable melodic turn on the word "*misericordis*." No. 5 is again a concerto-like movement for soprano.

while No. 6 calls for a solo trio whose voices are beautifully interlaced in liquid counterpoint. No. 7, a vivid choral piece of almost madrigalian lightness, is strikingly sung, but in No. 8 the tenor is once more hard put to cope with the fantastic coloratura, though he tries his best. The final "Gloria patri" is festive and sonorous, and one marvels at the boy trebles' ringing and colorful voices.

In *Lauda Jerusalem*, another fine psalm setting (147), solo and ripieno perform the verses alternately; the contrasts are striking. In the last work, *Domine adiuuandum me*, Vivaldi exploits the natural opportunity offered by the two choirs by making them sing here antiphonally, there united into one body. What a magnificent composed long crescendo in the first number! The "Gloria patri" is deceptively quiet, the solo soprano entering after a long ritornel with a gliding melody, but at "Sicut erat" the choirs do not wait for the usual ritornel—they explode with full chords, then break into one of Vivaldi's sprightly and sparkling fugues.

The performances are among the best I have heard in many a moon. The engineering is faultless—notably the choral sound, which is brilliant and finely equalized, with every part clearly etched. The John Alldis Choir is phenomenal. The trebles are simply magnificent; not only are the voices accurate, but, most rare with boy sopranos, they have plenty of carrying power and solidity even in the highest reaches. Here the chorus envelops the listener with sound that is like the rising surf; there they sing in the pointed madrigalian vein, pianissimo and leggiero, yet every note clearly tossed off. The English Chamber Orchestra is precise and supple.

As I have already remarked, Margaret Marshall must be the equal of that soprano of the Pietà who was so lavishly complimented by all visitors to the conservatory. She carries the brunt of the solo portions, but mezzo Ann Murray seconds her ably, and alto Anne Collins also delivers her solos elegantly. Tenor Johnson is not made for vocal acrobatics, but when sustained singing is called for he rises to the occasion, as does bass Holl. The continuo (organists Jeffrey Tate and Alastair Ross) is exemplary, always of just the right strength, supporting but not interfering, and free of those meaningless curlicues we usually hear. In general the ornamentation stays within judicious bounds.

All this is, of course, due to the generalissimo, Vittorio Negri, who is in absolute command, handling the large ensemble as if he were playing all by himself on a keyboard. The precision is of clockwork accuracy, the tempos lively but never hurried; one never hears the ticking of the metronome, and dynamics are well varied.

All in all, this is a stunning achievement, graced by excellent, scholarly, and informative notes by Michael Talbot. Though the as yet unworked lode of Vivaldi's manuscripts will undoubtedly yield more such masterpieces as these, what we already possess materially changes our traditional picture of the musical baroque; I only wish that Dallapiccola and Stravinsky, who so glibly maligned Vivaldi, could have heard this set.

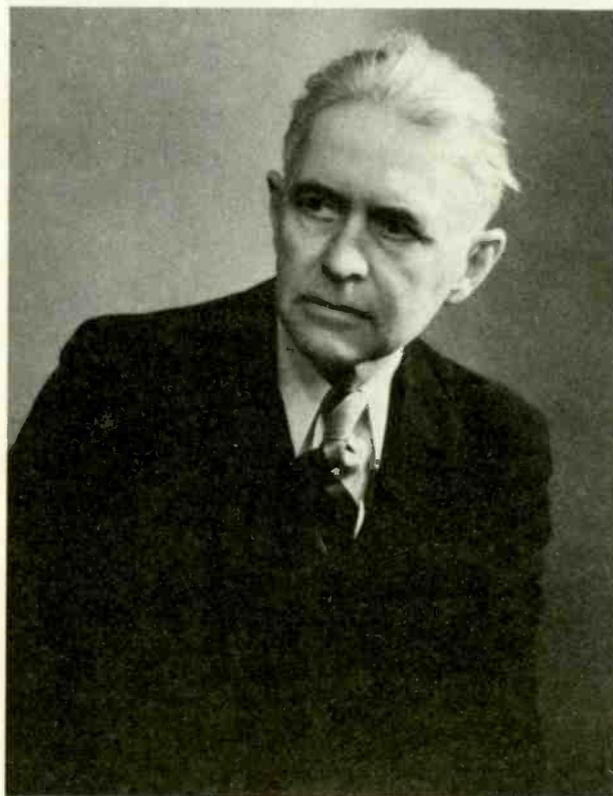
VIVALDI: Sacred Works, Vols. 1–2. Margaret Marshall, soprano; Ann Murray, mezzo-soprano; Anne Collins, alto; Anthony Rolfe Johnson, tenor; Robert Holl, bass, Jeffrey Tate and Alastair Ross, organs; John Alldis Choir, English Chamber Orchestra, Vittorio Negri, cond. PHILIPS 6700 116, \$17.96 (two discs, manual sequence).

Kyrie, RV 587; Domine ad adiuuandum me, RV 593; Dixit Dominus, RV 594 (with Introduzione al Dixit, RV 636); Beatus vir, RV 597; Lauda Jerusalem, RV 609.

Arthur Farwell: Rediscovering an American Original

MHS's welcome recording of the "Indianist" composer's piano quintet contrasts with the unsatisfactory performances offered by New World.

by Irving Lowens



POOR ARTHUR FARWELL picked the wrong years in which to be born and die. Had he come into the world four years later than 1872, or had he left it one year earlier than 1952, our recent bicentennial celebration would have taken place either a century after his birth or twenty-five years after his death, and he undoubtedly would have been rediscovered by somebody. But it didn't happen that way, and thus it comes about that his unpublished piano quintet, written while he was a member of the Michigan State faculty in 1936-37, is the first of his major works to be recorded, with the exception of the orchestral suite *The Gods of the Mountain*, Op. 52, which Karl Krueger's Society for the Preservation of the American Musical Heritage brought out in 1965 as played by the Royal Philharmonic.

Farwell deserves more attention than that—indeed Krueger refers to him, not without reason, as “probably the most neglected composer in our history.” Certainly he was one of our best-trained composers, completing his studies in the 1890s with Humperdinck, Pfitzner, and Guilmant in Europe after a stint at the New England Conservatory, and after his return to this country at the turn of the century he began his crusade to establish a national identity in music. Spurred on by Dvořák's challenge to American composers to utilize indigenous folk materials, Farwell founded the Wa-Wan Press in 1901 to provide for the periodical publication of American music, largely but not entirely folk-derived. The Wa-Wan Press became a storm center of controversy during the first decade of the twentieth century and helped materially in giving our serious composers a sense of dignity and purpose, as well as a national platform.

Farwell did not follow Dvořák's advice that American composers should go about creating a “national” music by drawing upon the music of the blacks for inspiration—instead, he turned to the Indians. But despite the fact that many of his own compositions drew from Indian sources, his approach to the problem was basically pluralistic. Although he was the acknowledged leader of the “Indianist” movement in American music, he welcomed colleagues who preferred to base their music on ragtime, Negro songs, cowboy songs, and “of the utmost importance, new and daring expressions of . . . sound-speech previously unheard.”

Of the piano quintet, Farwell wrote that “with the exception of the second movement, all the themes are from my notebooks of the years 1904 to 1907, during which time I was making my first journeys to the far West. It is likely, therefore, that in the first, third, and fourth movements there will be found something of the loneliness of the plains and the ruggedness of the mountains. There are no American folksongs whatsoever used for themes in this work.”

Without having read his note, I very much doubt that any contemporary listener would sense “the loneliness of the plains and the ruggedness of the mountains” in the quintet, but this is not to say that the work is devoid of interest and individuality. Although it was composed some four decades after his European studies, it is redolent of late romanticism. Occasionally, Farwell ventures into polytonality and polyrhythm, but the work as a whole is essentially tonal and uses the harmonic vocabulary of Richard Strauss or early Schoenberg. The most interesting movement is perhaps the second, which “was suggested by listening to a large Chinese gong struck softly but continuously, and noting the mu-

sical effects arising from the overtones.” The continuous iteration of the lowest C on the piano throughout the movement is almost hypnotic in effect. The performers, all of whom are members of the Pacifica Chamber Players on the West Coast, bring sympathy and sensitivity to their reading, and do full justice to Farwell's score.

New World Records' once-over-lightly survey of the Indianist movement is a different kettle of fish, however. NW 213 has roused the ire of many prominent historians of American music and has become something of a minor scandal among experts in the field. The release of the recording resulted in a bitter protest addressed to Herman Krawitz, president of NWR, from Neely Bruce of Wesleyan University, a respected member of the Rockefeller-funded project's editorial committee. Copies of his letter went to all of Bruce's colleagues on the committee as well as members of the press shortly after the record saw the light of day.

Bruce was moved to write to Krawitz shortly after listening to the Farwell performances in the company of Brice Farwell, the composer's son, who has been making a valiant effort in recent years to rescue his father's name from the obscurity into which it has fallen. Bruce makes his unhappiness about the whole venture crystal-clear, but he saves his most savage criticism for the performance of the two Op. 102 choral pieces, which he terms “truly scandalous.”

“In the first place,” he wrote, “the number of singers is off by about 200 percent, so that music which is obviously intended for large chorus is made to sound like madrigals. In addition to ruining the music, the decision to record these pieces with this number of singers makes the Rockefeller Foundation look cheap, since it was obviously made to save money. The performance of *The Old Man's Love Song* is out of tune and has no sense of longing or poignancy; it is also boring, because it is too slow. The performance sounds as if the tempo were chosen on the basis of how long it takes the singers to find the pitches.

“The *Navajo War Dance*, however, is far worse. The weak and preposterous effect which this performance makes must be heard to be believed. The piece as Farwell intended it is an imitation of American Indian singing, which is very different from the style of singing taught in most music schools in this country. The singers in this performance are either completely unaware of this or they deliberately refuse to try to carry out the composer's intention, in which case they should have been replaced with singers who would have been up for the adventure. Since the style of singing is intimately bound up with the meaning of the composition itself, we are not hearing the composition at all but an inept transcription which brings out the worst in the singers and the conductor and makes Arthur Farwell look like a fool.” Harsh words, these, but true ones, I am afraid.

Of the three Op. 32 songs, Bruce notes that “the singer, who is certainly adequate to perform this music, is not distinct with the Indian syllables and is not comfortable with the last song, the vocal style of which is an imitation of falsetto styles of singing common among certain Indian tribes. The songs are intense and filled with grand and even mystical images; very little of the real power of the pieces comes across. This is probably because the singer had to learn the pieces quickly and was not able to concern himself with the meaning of what he

was doing or the proper style of performance. In addition, the accompaniments are played in an insipid and unimaginative manner; for example, the pianist slows down in the opening of the first song when it gets hard, thereby removing all sense of danger and excitement from the music."

The two piano pieces, writes Bruce, are "somewhat better," but he has no words of high praise for Peter Basquin either.

Bruce confines his remarks to the Farwell performances and has nothing at all to say about the Preston Ware Orem and Charles Wakefield Cadman compositions that fill out the disc and give it a false appearance of representing the Indianist movement. Orem's *American Indian Rhapsody* is an absolute horror, a travesty of the movement that would provoke uproarious laughter for its pseudo-Lisztian bombast in a different context. And Cadman's slickly commercial utilization of Indian motifs is an embarrassment. To surround Farwell with music of such vapidness is to lessen his stature and that of his fellow seekers after a truly American idiom in music. Troyer, Loomis, and Skilton may be names known only to scholars, but surely they would have been more appropriate choices.

For an undertaking that boasts its devotion to authenticity and historical accuracy, there is a strange lack of precise data in the jacket notes. Not one date of the compositions recorded is cited. For Farwell, this information is easily available in *Brice Farwell's Guide to the Music of Arthur Farwell* (Briarcliff Manor, 1972), and to date the Orem and Cadman works would not be a task of insuperable difficulty. For the record, the Farwell Op.

32 songs were composed in 1912, the Op. 102 choral arrangements in 1937; Op. 20, No. 1, dates from 1912, and Op. 20, No. 5, from around 1905.

Bruce sums up the sad story of this record succinctly. "It is a sad irony that this disc, the first major recording of the music of Farwell in many years," he wrote to Krawitz, "makes its appearance to completely misrepresent the composer at a time when the Farwell family has, through a truly heroic and farsighted effort, succeeded in placing on microfilm the complete collection of the composer's work and is actively promoting performances of his music throughout the country. It seems so often the fate of the American composer that, on the one hand, well-intentioned persons try to bring the music of their culture to public attention and, on the other hand, incompetent performances misrepresent their work and thereby perpetuate the notion of the musical establishment that American music is not good or important."

B FARWELL: Quintet for Piano and Strings, in E minor, Op. 103. Aileen James, piano; Ronald Erickson and Celia Rosenberger, violins; Elizabeth Kissling, viola; Wanda Warkentin, cello. MUSICAL HERITAGE SOCIETY MHS 3827, \$4.95 (\$3.75 to members). Tape: MHC 5827, \$6.95 (\$4.95 to members). (Add \$1.25 postage; Musical Heritage Society, 14 Park Rd., Tinton Falls, N.J. 07724.)

FARWELL, OREM, CADMAN: Vocal and Instrumental Works. Various performers. [Horace Grenell, prod.] NEW WORLD NW 213, \$8.98 (distributed by Peters International).

FARWELL: Three Indian Songs, Op. 32 (William Parker, baritone, William Huckaby, piano). Navajo War Dance, Op. 102, No. 1; The Old Man's Love Song, Op. 102, No. 2 (New World Singers, John Miner, cond.). Navajo War Dance, Op. 20, No. 1; Pawnee Horses, Op. 20, No. 5 (Peter Basquin, piano). **OREM:** American Indian Rhapsody (Basquin). **CADMAN:** Four American Indian Songs, Op. 45 (Parker, Huckaby).

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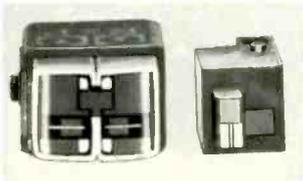
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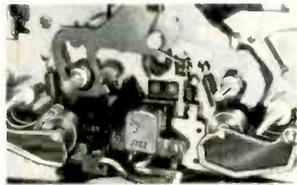
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Alfons and Aloys Kontarsky—an impressive and enjoyable disc

BARTÓK: Sonata for Two Pianos and Percussion.* **STRAVINSKY:** Concerto for Two Solo Pianos; Sonata for Two Pianos. Alfons and Aloys Kontarsky, pianos; Christoph Caschel and Heinz König, percussion*. [Werner Mayer, prod.] DEUTSCHE GRAMMOPHON 2530 964, \$8.98.

BARTÓK: Concerto for Two Pianos, Percussion, and Orchestra. **POULENC:** Concerto for Two Pianos and Orchestra. Vlastimil Lejssek and Věra Lejsková, pianos; Brno State Philharmonic Orchestra, Miloš Konvalinka, cond. [Zdeněk Zahradník, prod.] SUPRAPHON 1 10 2074, \$7.98.

Bartók's Sonata for Two Pianos and Percussion, composed in 1937, seems to grow naturally and inevitably out of the sonic characteristics of the unusual instrumental ensemble for which it was conceived. Thus it has always seemed surprising to me that Bartók later decided to rescore the work as a concerto for two pianos, percussion, and orchestra. The orchestra rarely has much to do except double music that is already clearly expressed in one or both of the piano parts. And when it is given something of its own, it sounds rather flabby compared with the crisp, percussive effect produced by the original.

In the case of these two new recordings, one of which contains the sonata and the other the concerto, the superiority of the original version is further strengthened by an extraordinary performance by Alfons and Aloys Kontarsky, the brothers who specialize in twentieth-century music. Ably assisted by percussionists Christoph Caschel and Heinz König, they project the piece with strong rhythmic drive and enviable

precision. In fact, the playing is so transparent that some listeners may object to a lack of mystery in the slow, Impressionistic middle movement. But I find that the movement sounds quite beautiful this way—and only this way could it be so successfully integrated into the Kontarskys' rather special conception of the sonata as a whole.

If the Supraphon performance fails to achieve an equal intensity, it is nevertheless by no means bad, though one wishes that the playing of the Brno State Philharmonic Orchestra were a bit more incisive. The soloists, Vlastimil Lejssek, Věra Lejsková, and two unnamed percussionists, perform very well. They do smooth out the edges more, however, and this tends to reduce the terrific propulsive character inherent in much of the concerto.

The Kontarskys fill out their disc with two works by Stravinsky: The Concerto for Two Solo Pianos of 1935 and the Sonata for Two Pianos of 1944. The former is one of the most brilliant pieces ever conceived for

this ensemble and is one of the real masterpieces of the composer's neoclassical phase. The latter, although a work of more modest scope, is also distinguished by that special brand of detached yet compelling beauty characteristic of Stravinsky during this period. Both works are played with polish and elegance. Indeed, this entire DG disc is one of the most impressive and enjoyable issues to come my way in some time.

Supraphon couples Poulenc's two-piano concerto with the Bartók. This is a work that comes very close to being proper fare for a pops concert. But my own feeling is that Poulenc is really at his best when, as here, he wears his heart on his sleeve. The piece is full of charm and good spirits, and Lejssek and Lejsková play very well, though again one wishes that the orchestra were a touch stronger. R.P.M.

B BEETHOVEN: Sonatas for Piano (32). Anton Kuerti, piano. [Eleanor Sniderman, prod.] ODYSSEY Y4 34646, \$15.92 (four discs); Y3 34647, Y3 34648, and Y3 34649, \$11.94 (three discs) each.

Vol. 1: No. 1, in F minor, Op. 2, No. 1; No. 2, in A, Op. 2, No. 2; No. 3, in C, Op. 2, No. 3; No. 4, in E flat, Op. 7; No. 5, in C minor, Op. 10, No. 1; No. 6, in F, Op. 10, No. 2; No. 7, in D, Op. 10, No. 3; No. 8, in C minor, Op. 13 (*Pathétique*); No. 9, in E, Op. 14, No. 1; No. 10, in G, Op. 14, No. 2; No. 19, in G minor, Op. 49, No. 1; No. 20, in G, Op. 49, No. 2. Vol. 2: No. 11, in B flat, Op. 22; No. 12, in A flat, Op. 26; No. 13, in E flat, Op. 27, No. 1; No. 14, in C sharp minor, Op. 27, No. 2 (*Moonlight*); No. 15, in D, Op. 28; No. 16, in G, Op. 31, No. 1; No. 25, in G, Op. 79. Vol. 3: No. 17, in D minor, Op. 31, No. 2 (*Tempest*); No. 18, in E flat, Op. 31, No. 3; No. 21, in C, Op. 53 (*Waldstein*); No. 22, in F, Op. 54; No. 23, in F minor, Op. 57 (*Appassionata*); No. 24, in F sharp, Op. 78; No. 26, in E flat, Op. 81a (*Das Lebewohl*); No. 27, in E minor, Op. 90. Vol. 4: No. 28, in A, Op. 101; No. 29, in B flat, Op. 106 (*Hammerklavier*); No. 30, in E, Op. 109; No. 31, in A flat, Op. 110; No. 32, in C, Op. 111.

Explanation of symbols

Classical:

- B** Budget
- H** Historical
- R** Reissue

Recorded tape:

- Open Reel
- 8-Track Cartridge
- Cassette

Some of the performances in Kuerti's Beethoven cycle—notably Op. 31, No. 1: the *Waldstein*; Op. 54; and Op. 101—are exquisite in their synthesis of digital mastery, structural logic, translucent sonority, and rarefied counterpoint. Only a superior technician and thinker could attain results on so high a level; if only the cycle maintained it!

Too much of the music is meted out in finicky, humorless jabs and spurts, with pianissimos that strain audibility and fortes that have little impact. Kuerti's textures are so spare, and his control so rigorous, that only rarely can the listener become physically involved. The opening of Op. 10, No. 1, is a case in point: This early work, a spiritual precursor of the Fifth Symphony, begins with an explosive chord quickly followed by an upward darting figuration in dotted rhythm—rather like the ripple effect that follows a stone hitting water. Kuerti, presumably intent on indicating that a rest separates the chord from what follows, detaches the stone from the rippling aftermath, a choice that is objectively defensible but in its pedantry destroys the sense of the music. Many of the slow movements, however marvelously voiced, dissolve into splinters as Kuerti's rubato, not unreasonable in itself, disrupts a slow pace already lacking a securely established pulse.

Throughout these performances I am bothered by what I judge a lack of perspective in the doggedly precise attention to detail. Kuerti focuses equally on every accent, every rest, every subdivision of phrase, and the result for me is the opposite of the clari-

fication he is ostensibly seeking. The first movement of Op. 28 can be made to work at this extremely deliberate tempo, but that requires a sense of overview, with the mastery of rhythmic scansion of a Schnabel or Klemperer. Kuerti's unyieldingly tolling three beats per bar, fussy precision, and piercing chords make his sober tempo sound oppressive rather than expansive.

Sustaining slow tempos also demands a more generous tone quality, and in this regard his performances suffer in a manner similar to some of the recent playing of his onetime teacher Rudolf Serkin. Yet Serkin's new recording of the *Lebewohl* Sonata (in the television recital, Columbia M2 34596, reviewed this month), superficially so similar to Kuerti's, is altogether more winning thanks to its well-sprung rhythms and its elemental directness.

I suspect that I might have taken more kindly to Kuerti's readings if the sound were more flattering. Some sonatas are better reproduced than others—or perhaps their scoring is less injured by the drab, close-in pickup—but large doses of such brittle, unalluring tone are bound to take their toll. Turning up the gain helps a bit, but that increases background noise.

One layout oddity should be noted: The *Hammerklavier*, like Louis Kentner's on Saga, requires a double turnover; to avoid a side break in the Adagio, the fourth and first movements are on Side 1, separated by a locked groove at the sonata's end. This arrangement unfortunately severs the link between the third and fourth movements: The

introduction to the finale begins with the same notes, transposed downward a semitone, as the broken chord that concludes the Adagio. (A faster tempo for the Adagio would have circumvented the timing problem and at the same time provided a more cohesive result, although on the whole Kuerti's grandly paced if a shade involuted reading of this greatest of the sonatas is very fine.)

I would suggest that prospective buyers try to sample the best and worst of this cycle. The best was noted at the start of this review; at the other end of the spectrum—in addition to the performances already cited—are the arid first movement of the *Moonlight*, the tedious Op. 90, and the pingy Op. 111. If you can accept these, you will probably find much to admire here. Check Vol. 3, however; in the initial press-run, at least, the first two notes of Op. 54 are missing. H.G.

BRAHMS: Piano Works, Op. 116. **SCHUMANN:** *Nachtstücke*, Op. 23. Antonin Kubalek, piano. [David Jaeger, prod.] CITADEL CT 6027, \$6.98.

Antonin Kubalek (born in 1935) is a Czech expatriate who has been partially blind since suffering an accident at the age of ten. Since the 1968 uprising, he has lived in Toronto, where this on-location recording originated. Except for an occasional shuffle (from a very quiet and obviously attentive audience), nothing would differentiate the sonics here from the very best: The sound is that of a wonderful, plangently mellow instrument resounding in a large auditorium. Voices are beautifully delineated, richly orchestrated, and crowned by a clear, clinging resonance. It is an ideal sonority for Brahms and Schumann.

The playing, in turn passionate, poetic, and tensile, suggests that of a major artist. Kubalek has a solid command here, a disciplined sense of internal shaping and architecture. His sense for rubato is right for this sort of writing, with rapture and severity well balanced. There is a wide dynamic range, a vivid color palette, and just a touch of wildness in the playing that makes the extreme introversion at other times all the more poignant. And with all the loving subjectivity, the basic impression is one of healthy directness.

I had not heard of this pianist before, but you can bet that at least one music lover will be listening to his next records and concerts with extreme interest. H.G.

BRITEN: Instrumental and Vocal Works. For a feature review see page 97.

BRUCKNER: Helgoland—See Wagner: *Das Liebesmahl der Apostel*.

CHAUSSON: *Poème de l'amour et de la mer*—See Debussy: *La Dame à la robe bleue*.

CHAUSSON: *Poème de l'amour et de la*

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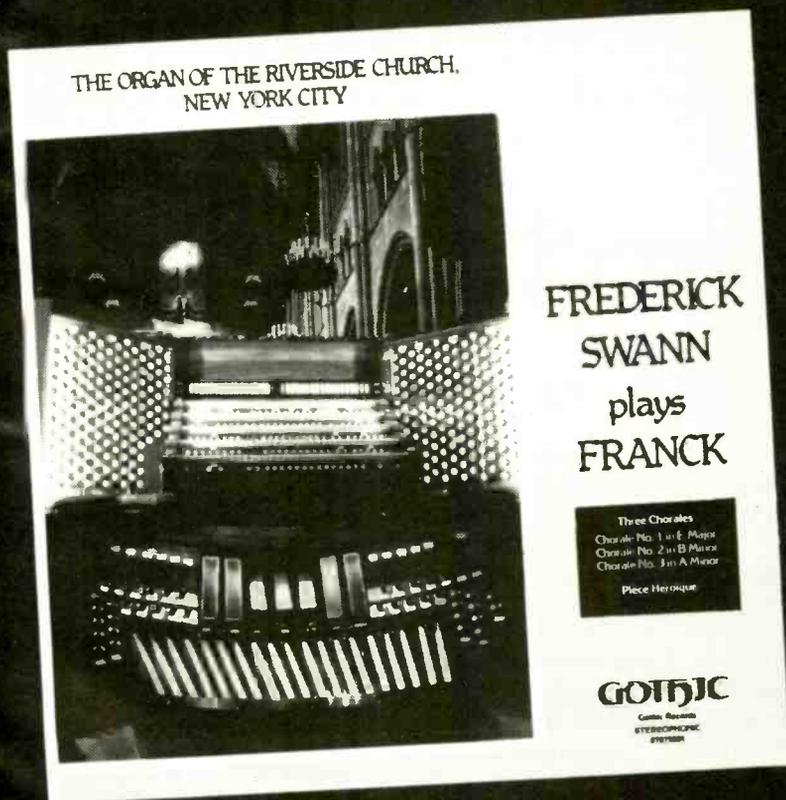
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mer—See Recitals and Miscellany: Martial Singher: French Song Recital.

CHOPIN: Works for Cello and Piano. Nathaniel Rosen, cello; Doris Stevenson, piano. [David Hancock and Max Wilcox, prod.] **DESMAR DSM 1009G, \$8.98.**

Sonata in G minor, Op. 65; Grand Duo on Themes from Meyerbeer's "Robert le Diable"; Introduction and Polonaise, Op. 3.

Thirty-year-old Nathaniel Rosen, who last season became principal cellist of the Pittsburgh Symphony, is an admired chamber music player and has been giving solo concerts since he was thirteen. Several seasons ago, in New York's Tully Hall, I was impressed by his warmly lyric sound and communicative flair but noted strain in bravura moments (spread shifts, suspect intonation in high positions, slightly lethargic timing). When I heard him again in the fall of 1977 he had matured strikingly—there was far more simplicity, a more effortless technique, an unmistakable gain in assurance.

Normal growth—and the confidence gained from being offered the Pittsburgh position and winning the first Naumburg Cello Competition—would explain that transformation, but I think the difference also had much to do with Rosen's collaborators. The pianist of the earlier recital was Doris Stevenson (also heard on this disc), a workmanlike but not very scintillant performer; the 1977 pianist was Samuel

Sanders, one of the strongest supporting artists now before the public, and I suspect that his more assured and metrically more resourceful playing had a salutary effect on Rosen, who as noted is an experienced chamber player and thus apt to be particularly responsive to such stimuli.

On this disc too Rosen does his best playing where Stevenson does hers, in the Grand Duo; the pianist's long solo introduction conveys a variety of nuance and atmosphere that subtly energizes what follows from the cellist. A most attractive performance of a work of charm, if no great profundity.

In the main theme of the Introduction and Polonaise and in the mazurkalike opening of the sonata's second movement, Stevenson's timorous work fails to provide the necessary rhythmic curve, and Rosen, consciously or not, attempts to fill the expressive void. As a result, he sounds a bit syrupy and overexpressive in music that needs merely graceful line-spinning from the cello. Then too, the main tempo for the Polonaise is a bit sedate, and comparable parts of the sonata—the most substantial of the three works—are slightly labored and lacking in ebullience.

While this performance of the sonata lacks the elegance of the deleted Piatigorsky/Firkusny (RCA) and Tortelier/Ciccolini (Angel) versions and does not give us the full measure of Rosen's abilities, this disc does offer capable readings of all of Chopin's cello/piano works, beautifully re-

produced and immaculately processed (the German Teldec pressing is a decided asset). In the shorter works, incidentally, Rosen uses the (unobjectionable) emendations of his late teacher, Piatigorsky. H.G.

Since this review was written, Nathaniel Rosen has won first prize among cellists in the 1978 Tchaikovsky Competition in Moscow.

DEBUSSY: *La Damoiselle élue*. * **CHAUSSON:** *Poème de l'amour et de la mer*. Montserrat Caballé, soprano; Janet Coster, mezzo*; Ambrosian Ladies' Chorus*, Symphonica of London, Wyn Morris, cond. [Isabella Wallich, prod.] **PETERS INTERNATIONAL PLE 021, \$7.98.** Tape: **PCE 021, \$7.98.**

Comparison—Chausson:
De los Angeles, Jacquillat/Lamoureux Orch.
Ang. S 36897

Debussy's *La Damoiselle élue* predates Chausson's *Poème de l'amour et de la mer*, finished in 1892, by some four years, yet there is no question that aesthetically the Chausson work marks the end of one era while the Debussy foreshadows the beginning of another.

In the *Poème*, based on a Romantic poem filled with pantheistic imagery, one finds a rich chromaticism of the César Franck school; these harmonies, despite their vagueness, combine with the sumptuous orchestration to produce strongly dramatic forward motion. The work, in two principal

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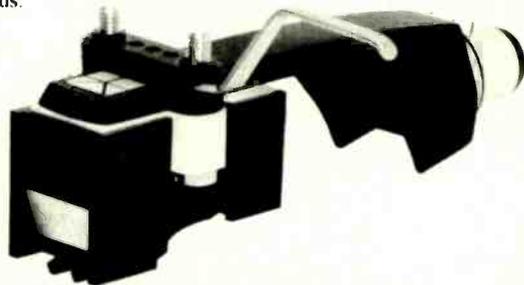
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movements separated by a somber orchestral interlude, also relies heavily on melody. (Those acquainted with Richard Rodgers' *Victory at Sea* score should have no trouble recognizing the inspiration for its principal theme in one that is heard subtly in the *Poème's* first movement and then returns in a modified version in the third.)

Everything is more vertical and static in *La Damoiselle élue*. In this early work Debussy was already concerned with subtle relationships between tone colors, as in his ethereal use of the women's chorus. And whereas Chausson subordinates the text to the melodic line, Debussy molds vocal lines around the French verbal contours. We find much here that is to emerge fully later in Debussy: Transposed down several registers, the opening would be very similar to the beginning of *Pelléas et Mélisande*, and there is more than a hint of *Le Martyre de Saint Sébastien*.

The music for *La Damoiselle élue* does not fit Montserrat Caballé's voice well. She does not pronounce the French properly and consequently seems to be doing unceasing battle with the musical-verbal continuity. And in trying to give each and every syllable utmost expressiveness, she misshapes the music and often forces her voice into unpleasant colorations. She suffers the further disadvantage of frequently being drowned out by the orchestra. I like her better in the Chausson, but here the performance of another Spanish diva, Victoria de los Angeles, strikes me as even better. De

los Angeles is far from perfect, but her performance is less labored and her tone quality for the most part more attractive than Caballé's.

In both works, however, I was impressed by the orchestral playing under Wyn Morris. Although the Symphonica of London sounds smallish (the *Lamoureux Orchestra* on the Angel recording of the Chausson has a more sensuous sound), Morris obtains fullness and excellent balance from his ensemble; even more importantly, he creates a sense of fluidity, a limpidness in his phrasing that perfectly fits the music. In the minor role of the "Récitante" in *La Damoiselle élue*, mezzo Janet Coster is adequate but rather tired-sounding; the Ambrosian Ladies' Chorus sings brilliantly.

This disc does contain the only stereo version of *La Damoiselle* listed in SCHWANN (the mono De los Angeles/Munch recording is available on RCA Victorla, AVM 1-1412), but I hope something better may be forthcoming. For the Chausson, I recommend the De los Angeles version, coupled with the charming *Cante-loube Songs of the Auvergne*. R.S.B.

DUPARC: Songs—See *Récitals and Miscel-lany: Martial Singher: French Song Recital*.

B **DVOŘÁK:** Quartets for Strings: in E flat, Op. 51; in A flat, Op. 105. Gabrieli Quartet. [Michael Woolcock, prod.] LONDON TREASURY STS 15399, \$3.98.

Comparison—Op. 105:
Guarneri Qt.

RCA LSC 2887

DVOŘÁK: Quintet for Strings, in E flat, Op. 97. * *Silent Woods*, Op. 68, No. 5 (arr. Suk).† Josef Suk, viola; Smetana Quartet*; Jan Pa-nenka, piano*. [‡ Jan Vrána and Pavel Kühn, prod.; † Zdeněk Zahradník, prod.] SUPRAPHON 1 11 2179, \$7.98.

Comparisons—Op. 97:
Budapest Qt., Trampler
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The Gabrieli rendition of Op. 105 in A flat, Dvořák's last quartet, has a few trifling flaws: momentary straying from pitch by first violinist Kenneth Sillito, some boomy low-register sounds from cellist Keith Harvey, and a bit too much swooning in the Allegro appassionato of the first movement. But these are outweighed by the overall virtuosity and musicianship, and I expect to listen to this performance as often as to the Guarneri's tougher, more contained Op. 105 (coupled with Smetana's *Aus meinem Le-ben* Quartet). I certainly couldn't ask for a

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CIRCLE 8 ON PAGE 141

finer Op. 51, and in both works the Prague Quartet's installments in its DG Dvořák series are safely outdistanced—and at budget price. A Gabrieli Dvořák cycle would be a pleasant prospect.

The Smetana Quartet's new recording of the E flat String Quintet, Op. 97, with guest violist Josef Suk, lacks the taut, propulsive, and delicately filigreed quality of the Schuster/Austrian and Trampler/Budapest recordings. The Smetana (in particular first violinist Jiří Novák) tends to force in loud passages, producing a wiry, sticky sound; contrapuntal and harmonic transparency suffers in fast movements. In addition, its rhythmic underplaying produces, after a time, a certain subliminal irritation, even boredom. Nonetheless the performance has its points. Suk is lovely and refined in the trio of the scherzo, and the entire ensemble is impressively sensitive to the expressive and coloristic range of the variations that make up the ensuing Larghetto. The outer movements, while wanting in sustained intensity and structural shaping, are attacked with blunt and hearty vigor.

Although all the current rival versions of Op. 97 include more substantial couplings than the new disc, Supraphon's brief filler is of interest. Dvořák himself arranged *Silent Woods*, which originated as part of the piano-duet cycle *From the Bohemian Forest*, for cello and piano and for cello and orchestra. (The latter version has been turning up with increasing frequency as a filler for the B minor Concerto.) Suk has made his own arrangement for viola and piano, and his performance here—with his usual keyboard partner, Jan Panenka—has persuaded me that this is a lovelier and more substantial piece than I'd suspected. A.C.

FARWELL: Various Works. For a feature review, see page 100.

HANDEL: *Rinaldo*.

Almirena	Ileana Cotrubas (s)
Armida	Jeanette Scovotti (s)
A Woman	Sophie Boulin (s)
Sirens	Nicole Leport, Marie-Françoise Jacquelin (s)
Rinaldo	Carolyn Watkinson (ms)
Goffredo	Paul Esswood (ct)
Eustazio	Charles Brett (ct)
Magician; Herald	Armand Arapian (b)
Argante	Ulrik Cold (bs)

Danièle Salzer and Odile Bailleux, harpsichords; Grande Ecurie et Chambre du Roy, Jean-Claude Malgoire, cond. [Georges Kadar, prod.] COLUMBIA M3 34592, \$23.98 (three discs, manual sequence).

Baroque opera, though gratifyingly gaining in acceptance, embodies some of the most difficult problems facing both the revival of old music and its performance practice.

The theater is the most period-bound of the arts. Its social and artistic conventions are strong and binding while they exist, but after the passing of two or three generations much of what was originally admired seems strange, if not ridiculous. The figures in the opera seria appear to us like the old Egyptian statues, frozen into timeless attitudes. Handel was not satisfied to limit his characterization of dramatic protagonists to the musical means pre-

scribed by contemporaneous stage customs and economics, and though he succeeded in creating characters in the round, he still remained within the traditional framework of the seria.

Then there is the seemingly insoluble problem of the castrato, the principal singer during the baroque period. There are two ways to effect a replacement, the partisans of each vociferously opposed to the other: Either we may obey the changed views of theatrical verisimilitude, allotting the castrato roles to (whole) men, tenors or baritones, by transposing the parts an octave lower, which can be done with minimal changes in the continuo, or the castrato parts may simply be turned over to women, who can sing the roles without further ado. This is not the place to discuss the respective merits of the two schools of thought, but, as we shall presently see, Jean-Claude Malgoire has adopted a third alternative. Finally there is the problem of vocal ornamentation.

The librettist of *Rinaldo*, Giacomo Rossi, complains in his preface that "Mr. Handel, the Orpheus of our century, scarcely gave me time to write, and to my great wonder I saw an entire opera put to music in only two weeks." What Rossi did not know was that Handel, an imperious musical condottiere who almost always judged the situation with shrewd insight, saw the opportunity to break into the top echelon of London's musical life and, being in a hurry, borrowed left and right from his older works. When Rossi could not keep up with him, Handel used not only the music from his successful Venetian opera, *Agrippina*, but the words too—they are still there.

The pasticcio notwithstanding, *Rinaldo* is one of Handel's great works, the newly composed numbers containing some of his most memorable melodies, and the new recording is therefore more than welcome. *Rinaldo* was a great success, and it soon made its way to Ireland, Germany, and Italy; the twenty-six-year-old composer was indeed regarded as the new Orpheus. The success does not mean, however, that Italian opera was acceptable to Englishmen beyond a rather restricted aristocratic audience, many of whom were acquainted with it from their customary grand tour of the Continent. The literary world, led by Addison and Steele, attacked *Rinaldo* in *The Spectator*, Addison denouncing "the forced thought, cold conceits, and unnatural expressions of an Italian opera." and Steele remarking with disgust that "by the Squeak of their Voices the Heroes are Eunuchs."

Recording such an opera is a hazardous venture. Baroque opera was visually spectacular, and *Rinaldo*, a "magic" opera, was particularly so. The elaborate stage directions specify thunder and lightning, chariots drawn by horses, illuminations, dragons spitting fire (a fire brigade was kept handy with filled water tanks), and also dancing. The fantasy was enhanced by such realistic touches as the loosing of a flock of birds during Almirena's delicious "birdsong" aria. Aaron Hill's original preface to the libretto says that such an opera "should fill the Eye with delightful Prospects, so at once to give Two Senses equal Pleasure."

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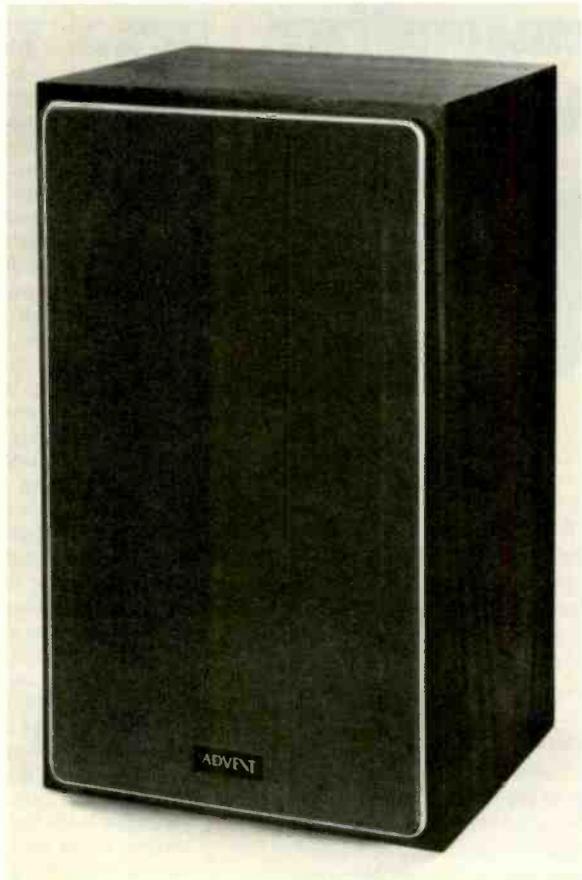
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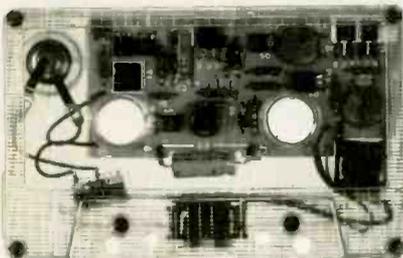
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CIRCLE 60 ON PAGE 141

Well, all that this recording could do to satisfy the "other Sense" was to employ a silly wind machine and a few spatial tricks to suggest approaching and departing military bands and singers. But despite the inevitable loss of a dimension, which makes us more conscious of the static nature of opera seria, *Rinaldo's* music alone is very enjoyable.

Malgoire's choice of cast is difficult to understand: He neither transposes the castrato parts for men nor gives them to women, but engages two countertenors, who are neither fish nor fowl so far as singing voices are concerned. Malgoire himself admits in his notes that when Handel did not have castratos in his troupe he had women sing these roles. I hasten to add that both Paul Esswood and Charles Brett are fine and cultivated musicians, and those who like countertenors can be assured that their performance is immaculate. But God created sopranos and altos as women, and God saw that it was good. I am with Creation, and though countertenors are not without admirers, to my mind they cannot touch a natural male or female voice because their voices lack color and resonance.

The countertenors are especially at a disadvantage in this recording in the fast repartees in recitative when they are pitted against the warm and resonant voices of the women. Ileana Cotrubas (Almirena) has a fine voice, which she uses intelligently and expressively; she can trill and takes the fanciful fioriture in her stride. In the aria "*Bel piacere*," where she is required to sing stretches without any accompaniment, she stays gloriously on pitch. Carolyn Watkinson (*Rinaldo*) is an ample-voiced alto. Her aria "*Cara sposa*" is one of Handel's greatest melodies, and she sings it very attractively. Jeanette Scovotti, a fiery dramatic soprano, is for the most part very good, though in the animated passages her temperament leads her into slightly unfocused singing; when she joins with Cotrubas in a superb duet, she makes up for the few uncertain notes that escaped her earlier.

Ulrik Cold (Argante) is that rarity, a bel canto bass. He sings very smoothly and warmly, with poise and secure sense of pitch, and he is freer in the recitatives than are the others, but he is addicted to a little swooning here and there. Armand Arapian (the Magician and Herald) is the only principal in the cast below par; his voice is unsteady and has a slight buzz.

It is difficult for the reviewer to account for the general direction of this performance. Malgoire is listed as "Director" of the musical establishment with that fancy Louis XIV name, *La Grande Ecurie et la Chambre du Roy*, but, like Nikolaus Harnoncourt, he carefully avoids the designation "conductor." All right, they did not have conductors in our sense in Handel's time, but the *maestro al cembalo*—in this case Handel himself—was the de facto conductor and very much in charge of the proceedings. Neither of the two able harpsichordists here, Danièle Salzer and Odile Bailleux, is given that title.

Whatever the case, though all performers stay together correctly, the absence of an authoritative overall leader is felt. There are very few tempo alterations, the phras-

ing and dynamics in the orchestra are unadventurous, and the singers are obviously afraid to take any legitimate liberties for fear of upsetting things. The much prized historical authenticity does not demand the avoidance of any and all means that would help to achieve it. Anyway, on a recording no one would see the horrible anachronism of a man without wig and satin knee breeches flailing the air with a baton, so why not cheat a little and make the performance livelier?

The plucky little orchestra—it is not much more than an enlarged concertino—plays well but often sounds pretty thin; only excellent microphone placing and sound engineering makes it believable. This very small orchestra is not even correct historically, because Handel had at his disposal a regular theater orchestra twice the size of this one, and *Rinaldo* is particularly richly orchestrated, with oboes, bassoons, recorders, and trumpets in addition to the strings. Solo oboe and solo bassoon are first-class, and so are recorders and the piccolo, but the strings are pale.

At certain points the performance is in jeopardy despite the good singing, because John Holloway, the "leader," and thus presumably the solo violin in the concertino (there is also a "co-leader" for the total of seven fiddles), has an unattractive tone to the point of annoyance. He plays without vibrato, and when he gets into the higher regions it sounds as if all tones were being played on open strings. He almost ruins Almirena's beautiful aria "*Lasciate me*," when he engages the colorful alto of Watkinson in echo imitations.

At that, many of the orchestral effects come across surprisingly well, thanks to the good electronic handling (which of course is a gentle fraud); the bird music with strings, recorders, and piccolo is absolutely delightful. The harpsichord accompaniment in the ripieno portions of the score is excellent, but in the recitatives there is too much arpeggiating. These recitatives are called "secco" because the chords must be just that—dry—and while here and there arpeggios are in order, constant strumming makes the cadences indeterminate and sort of mangy.

Finally a few words about the libretto. Rossi is the librettist of record, but he "filled up the Model I have drawn," says Hill, a playwright and poet of exactly Handel's age. Though he was well regarded in theatrical circles, Pope represented him in *The Dunciad* as one of the competitors for the prize offered by the Goddess of Dulness, but he was well disposed toward Handel, and he undoubtedly had an important share in the libretto. However, the libretto as printed in the brochure that accompanies the recording is puzzling. We are given both Rossi's Italian and Hill's English version thereof, the rub being that a little more is sung than is printed in Italian, while the English version is longer and often quite different from the original. Perhaps this is not a translation, but Hill's "Model." In addition, occasionally one of the countertenors is substituted for *Rinaldo* without any warning, which is disappointing. It is strange that in a Columbia release, and in a brochure written entirely in Eng-



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lish (although the records and booklet were in fact made in France), complete with the facsimile signature of "George Frideric Handel," the composer is always referred to as Georg Friedrich Haendel. Once in England, Handel always used his Anglicized signature, by which he is exclusively known in the English-speaking world.

Though this version is a little flawed by excessive historical zeal, Malgoire's selection of the performing material (this opera never had a settled shape) is judicious and much of the performance is a source of pleasure. This recording should be an important addition to the Handelian canon.

P.H.L.

Liszt: Piano Works. Misha Dichter, piano. PHILIPS 9500 401, \$8.98. Tape: ♫ 7300 639, \$8.98.

Harmonies poétiques et religieuses: Funérailles. Hungarian Rhapsodies Nos. 11, 14. Années de pèlerinage, First Year: Au bord d'une source. Mephisto Waltz No. 1. Song Arrangements: Liebesbotschaft; Die Lorelei.

Touches of ravishing color and unexpected groupings elevate these virtuosic performances from the solidly conventional to the freshly scintillant. In the Mephisto Waltz, the puckish unpredictability of the playing combines with the unusually wide dynamic range of the recording to create an engagingly seductive aura. Similarly, the hint of offbeat accentuation in the concluding sec-

tion of the Hungarian Rhapsody No. 11, the orchestral sonority and spacing of the longer No. 14, the caressing phrase-shaping of "Au bord d'une source," and the limpid refinement of Dichter's legato in the two song arrangements demonstrate the crucial difference between lapidarian craft and mere efficiency.

Yet these readings are never overly precious. When thundering octave roulades or great swashes of sound or glittery runs and chords are required (as in the middle section of "Funérailles" and portions of the Mephisto Waltz and the rhapsodies), Dichter supplies them with a refreshing lack of pretension. As a Lisztian he should win many friends. Typically fine Philips engineering and processing set off the playing to best advantage.

H.G.

Liszt: Piano Works and Arrangements. Ervin Nyiregyházi, piano. [Thomas Frost and Gregor Benko, prod.] COLUMBIA M2 34598, \$15.98 (two discs).

Hungarian Rhapsody No. 3. Historical Hungarian Portraits: Michael Mosonyi. Weihnachtsbaum: Abendglocken; Polnisch. Nuages gris. Harmonies poétiques et religieuses: Miserere, after Palestrina. Années de pèlerinage, Third Year: Aux cypres de la Villa d'Este, No. 1. Hamlet (arr. Nyiregyházi). Christus: March of the Three Holy Kings (arr. Nyiregyházi).

Listening to this album is in some ways like eavesdropping: This is the playing of a man who regards his music simply as an outlet for self-expression, which is to say that Nyiregyházi frequently expresses his feeling about the music (or at least his feeling of the moment) rather than that of the music itself. He has no use for the discipline of practice and indeed hasn't owned a piano in close to forty years. These records were made under a Ford Foundation grant, and Nyiregyházi consented to play for the microphones only on condition that the sessions be held in a completely unstructured way. No one knew beforehand what he would play, and there were only one or two retakes.

The iconoclastic Hungarian-born pianist seems past caring whether the world approves of his music-making, and yet his recent celebrity and the presence of those eavesdropping microphones seem to have inhibited him. Compare his playing here with the performances of Liszt's two "St. Francis" Legends (on IPA/Desmar IPA 111, February 1978) taped by an interested amateur at a still fairly obscure 1973 recital: There Nyiregyházi's liberties have a certain flowing inevitability; these studio performances—all, to an extent, amateurishly clumsy and static—have the constraint of posed snapshots, and without compensating fluency it becomes much harder to make allowances for the textual distortions and missed notes.

Still, there is some merit in what Columbia has given us. Few performers today believe so wholeheartedly in the music they are playing, and this loving, unpatronizing subjectivity makes an impression. Moreover, one can still sense the remnants of a once imposing epic style and a distinctively opaque sonority reminiscent of Cortot's. And many of these late Liszt compositions are infrequently performed, even on records. Nuages gris, with its foreshadowings

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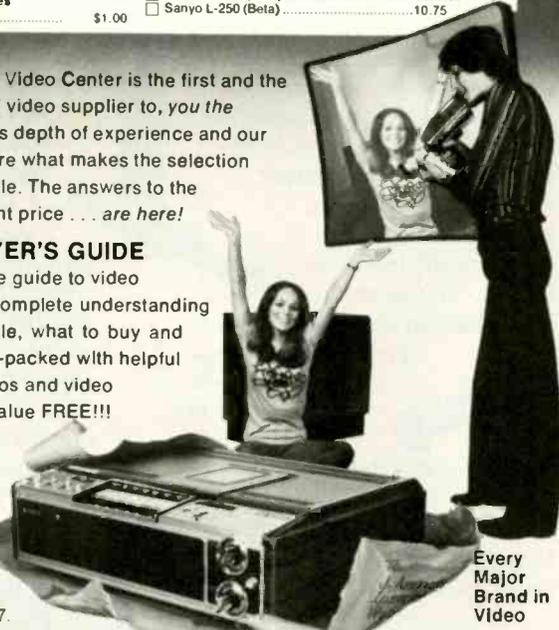
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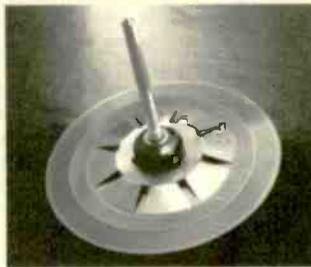
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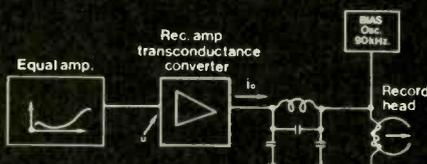
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of Impressionism, makes a nearly magical effect; much of Nyiregyházi's ruminative stretching works here, though the non-synchronization of hands impedes the on-going line. "Michael Mosonyi" (from the *Historical Hungarian Portraits*) and "Abendglocken" (from *Weihnachtsbaum*) are similarly potent, and similarly marred by lethargic discontinuity and mauled inner voices.

The "Miserere, after Palestrina" (from *Harmonies poétiques et religieuses*) is frightening, almost hallucinatory, as re-created by this obviously devout disciple, and the pianist's own arrangements of the symphonic poem *Hamlet* and of the "March of the Three Holy Kings" from the oratorio *Christus* make up in fervor and decibels what they lack in nuance and digital poise. Even the *Hungarian Rhapsody* No. 3, full of crudities and dubious textual alterations, has some saving graces. Nothing, however, can justify the heavy-handed bludgeoning of the charming "Polnisch" (from *Weihnachtsbaum*).

It is tantalizing to imagine what this much-bruised artist might still have to offer us, given not media hype ("the reincarnation of Liszt" etc.), but the assurance of serious interest in his playing coupled with some compassionate yet firm critical guidance. Nyiregyházi owes it to himself to preserve his potentially noble art in a less hazardous fashion. H.G.

MAHLER: *Symphony No. 1*, in D. Boston Symphony Orchestra, Seiji Ozawa, cond. [Rainer Brock, prod.] DEUTSCHE GRAMMOPHON 2530 993, \$8.98. Tape: 3300 993, \$8.98.

Ozawa asks for and gets the Boston Symphony's most solidly virtuosic playing, and he projects the symphony's general outlines (with both repeats) as conscientiously as he scrubs and polishes the surfaces. Rhythmic control is sure, and, with the vivid contributions of the orchestra and the technical crew (DG has produced outstanding spread, depth, and textural translucency), the piece generates plenty of visceral excitement.

Yet there are at least two aspects in which the conductor doesn't, for me, come closely enough to grips with the music. One is the dry and disembodied woodwind articulation occasionally required for parodistic effect; Ozawa fails by a hairsbreadth to demand short enough note values at such points as the opening tune of the *Ländler* or the oboe solo in the *Funeral March*. The other problem is undercharacterization of Mahler's subtle modifications of tempo; thus the agonized effect of the alternate halting and picking up of speed at Nos. 22-25 in the first movement (near the coda) is vitiated by Ozawa's unyielding beat, as is the suspenseful holding back and release of animal energy after No. 9 in the finale, to say nothing of many lilting moments in the *Funeral March*. At the same time Ozawa introduces gratuitous expressive emphases where none are called for—for example, the all too common slackening at Nos. 25-26 in the finale and the terracing of dynamics in the ideally deadpan double-bass solo that begins the *Funeral March*.

Few buyers will be unhappy with this brilliant production, but for deeper stylistic penetration there are recordings that should stand the test of time better—notably Horenstein's (*Nonesuch H 71240*), Walter's (*Odyssey Y 30047*), and Haitink's (*Philips 6500 342*). A.C.

MARTIRANO: Mass. * MARTINO: *Seven Pious Pieces*.† The *Ineluctable Modality*, Edwin London, cond.* John Oliver Chorale, John Oliver, cond.* [Andrew Raeburn, prod.] NEW WORLD NW 210, \$8.98 (distributed by Peters International).

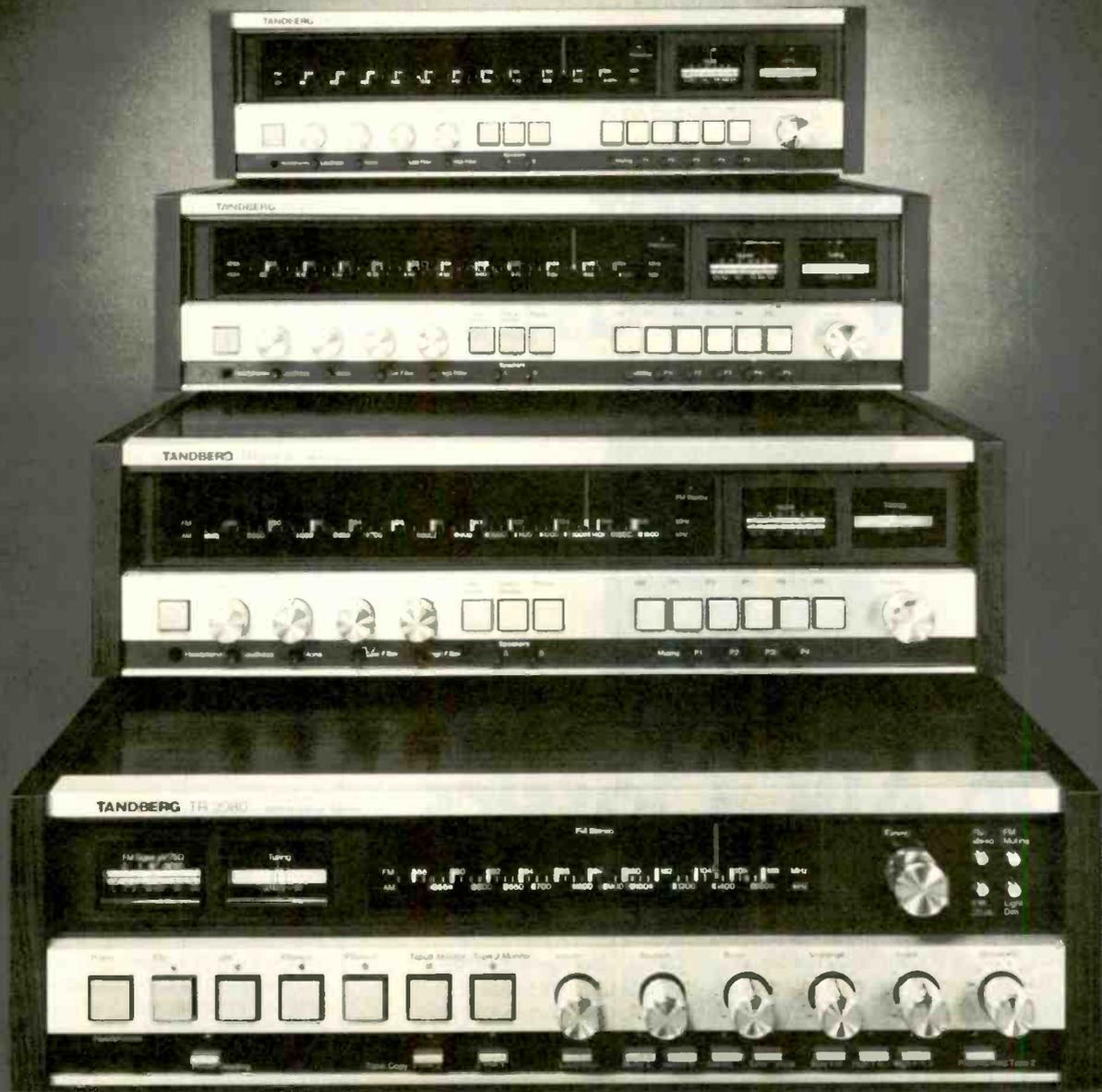
In his interesting, if somewhat quirky, liner notes to this New World release of contemporary sacred music, composer/conductor Edwin London (who directs the Martirano Mass) observes: "The sad fact is that almost no new music of substance has been incorporated into the liturgies of worship houses in this century." Although London then presents, as an appendix to his essay, a list of choral compositions on sacred texts by composers working in the U.S. in the twentieth century, he notes that the pieces listed are "de facto not apt for inclusion in services" and that such major figures as Babbitt, Cage, Carter, Oliveros, Partch, Reynolds, Schuller, and Wuorinen have published no music at all in this category. It is also symptomatic of this situation that the two compositions for a cappella chorus recorded here—by Salvatore Martirano and Donald Martino, two important figures of the postwar generation of American composers—are themselves works of a special nature, in both a historical and a stylistic sense.

Martirano's *Mass* is an early piece, whose style and aesthetic outlook seem far removed from his more recent and better-known music. Composed in the early 1950s, when he was still a student, it is an extended, convincingly shaped work in a mildly dissonant contrapuntal idiom that leans heavily on the tradition of Renaissance vocal polyphony. It sounds quite lovely, though it lacks the strong individual personality of Martirano's subsequent music (e.g., *Underworld* and *L'sGA*). (The composer himself is quoted as remarking on hearing the recorded performance: "The Amen of the *Credo* is really beautiful. Whose music is that?")

Similarly, Martino's *Seven Pious Pieces* on texts by Robert Herrick must be considered a special case. According to the composer, they were meant "to illustrate how a twelve-pitch-class piece could be made to seem tonal." As a result, they sound quite different from Martirano's "normal" serial music. Indeed, almost all of No. 6 appears to be tonal in the conventional, "functional" sense, and all seven pieces could be thought of as mildly distorted paraphrases of a late-nineteenth-century tonal style. (Martino observes: "A traditional tonal analysis of any of these songs can be made by anyone who is ingenious in the application of secondary-dominant labels and/or is a fanatic.")

The pieces, in fact, were apparently written on each of seven consecutive Sundays as a change of pace from Martino's other compositional activities, and he confesses

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that "one of their purposes was overtly commercial." With that kind of origin, one has no right to expect too much. Yet, although certainly not major works, they strike me as unusually effective examples of the anthem type.

The performances of both works, which contain considerable difficulties for the executants, are excellent. Texts are provided, as well as translations for the Mass. And London's notes on the role of music in the contemporary church and the attitude of the latter toward "modern" musical tendencies are informative and provocative.

R.P.M.

MOZART: Sonatas for Piano: in F, K. 332; in C, K. 545; in D, K. 576. **BACH-COHEN:** Chorale Prelude: Liebster Jesu, wir sind hier, S. 633. Cantata No. 22: No. 5, Ertöt uns durch dein' Güte. Alicia de Larrocha, piano. [James Walker, prod.] LONDON CS 7085, \$7.98. Tape: ♫ CS5 7085, \$7.95.

With "Mostly Mozart, Vol. 3," De Larrocha continues to work her way through the Mozart sonatas as a happy by-product of New York's summer Mostly Mozart Festival, where she is an audience favorite.

De Larrocha is of course a marvelously fluent pianist, whose runs "flow like oil" (to

use Mozart's phrase) and whose naturally lively sense of rhythmic articulation is partnered by a straightforward, joyous élan and a good instinct for suitable Mozart sonority. She perceives the dancelike elements in the music, and the vocal lines as well, without inflation or sentimentality—two common vices of "Romantic" practitioners in this repertory. Her artistry is quite beautiful as far as it goes, and for many it goes far enough. For me, a certain lack of minute attention to detail keeps these lovely readings from reaching the exalted plane of the finest Mozarteans, such as Schnabel (in K. 332), Perahia (in K. 576), and Gieseking. It may seem trivial that De Larrocha overlooks the exact length of an inner-voice rest or alters a harmony slightly, but such occurrences, unimportant in themselves, indicate that she may not be grasping all the polyphonic significance of Mozart's linear style—and that is important.

Still, this is an attractive disc, all the more so for the measured, aristocratic account of that perennial children's favorite, the C major Sonata, K. 545, and for the two Bach chorales in the tasteful arrangements of the late British pianist Harriet Cohen. The piano tone has a fine sense of space, yet is never swimmy or lacking in focus. H.G.

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Sir John Falstaff	Karl Ridderbusch (bs)
Herr Reich	Alexander Malta (bs)
Dr. Cajus	Alfred Sramek (bs)

Bavarian Radio Chorus, Bavarian Symphony Orchestra, Rafael Kubelik, cond. [Ray Minshull, prod.] LONDON OSA 13127, \$23.94 (three discs, automatic sequence). Tape: ♫ OSA5 13127, \$23.95.

Comparisons:

Klee / Berlin State Opera	DG 2709 065
Heger / Bavarian State Opera	EMI 1C 183 30191/3

A clear preference among the three recordings now available of Nicolai's amiable comedy is not easily established; in fact, I have enjoyed all three of them as performances. Kubelik's new entry is particularly distinguished by some elegant wind playing and by the conductor's relaxed but never slack pacing, as well as the smooth Decca/London recording. A modicum of spoken dialogue is present—less than Electrola offers, but a better solution than DG's annoying narrator (and of course London gives us a German/English libretto, as Electrola does not). And the music is complete, whereas Electrola's Heger made two "traditional" cuts in the first two finales.

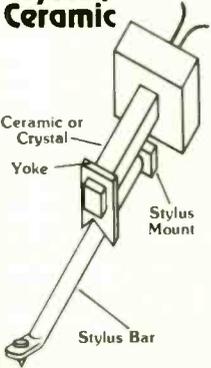
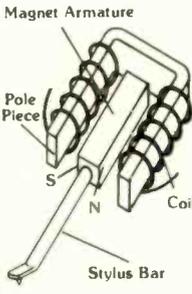
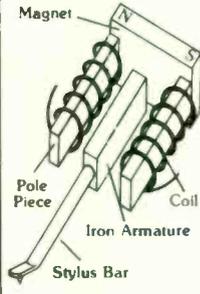
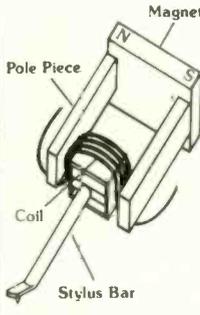
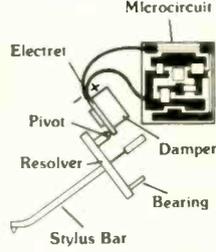
I mention these "external" matters prominently, because the report cards on the singing certainly don't yield any conclusive grounds for preference. Helen Donath, here promoted to Frau Fluth from Klee's Anna (as earlier Edith Mathis was from Heger's Anna to Klee's Frau Fluth), assumes a remarkably Schwarzkopfy posture—the puffed-up, breathy tone, pouty inflections, and hairpin attacks we know so well—that distracts one for a while; fortu-

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Transient Ability <i>(rise time in microseconds)</i>	60 to 100	30 to 60	25 to 50	20 to 30	17 to 20
Freq. Resp. Variation Due to Loading with Pre-Amp, Cables	±4dB below 1000Hz <i>(plugs directly into amp input)</i>	-10dB to +6 above 3kHz	-12dB to +4 above 3kHz	± ½dB over entire range	± ½dB over entire range
Ability to Perform In Variety of Tonearms	Works in low-cost units only	Good to Very Good	Fair to Very Good	Fair to Very Good	Very Good to Excellent
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User Replaceable Stylus	Yes	Yes	Yes	Usually Not	Yes
Method of Manufacture	Mass Production	Mass Production	Mass Production	Precision Handmade	Precision Handmade
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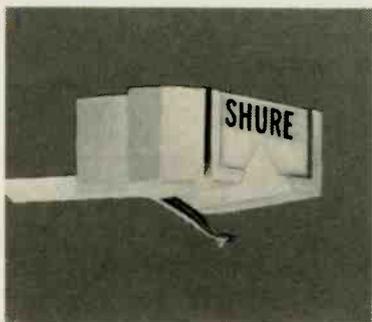
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CIRCLE 48 ON PAGE 141

nately, there's enough humor and vivacity in her performance to bring it off. Trudie Schmidt (Frau Reich) hasn't as impressive a voice as Klee's Hanna Schwarz, but makes her points well enough. Lilian Sukis is a poky, monotonous Anna, a role of which the young Mathis (for Heger) remains the best exponent.

Among the men, Claes H. Ahnsjö is a lighter, more winning Fenton than DG's Peter Schreier, though neither is in the same league as Heger's Fritz Wunderlich. Karl Ridderbusch makes a genial Falstaff, but his upper register is hardly as firm as that of Kurt Moll (DG)—and newcomers to the work should be reminded that the part is hardly as crucial here as in Verdi's opera. Wolfgang Brendel is a serviceable Fluth; I wish he and Ridderbusch had paid more attention to the softer dynamics in their famous second-act duet.

In other words, as so often, the "ideal" cast for the opera is spread among the different recordings: Electrola has the best pair of young lovers, DG the best lower male voices, and the honors are about even on the merry wives themselves. Kubelik and his orchestra do the most justice to the score's strong Weber-Mendelssohn overtones, abetted by the silken recording. As against DG's narrator and Electrola's cuts, London offers only the modest annoyance of overlapping the spoken dialogue with the beginnings and ends of some of the musical selections. You won't be disappointed by any of these sets, for the opera's ingenuity and craftsmanship are well served by all three.

D.H.

POULENC: Concerto for Organ, Strings, and Timpani, in G minor; Concerto champêtre, for Harpsichord and Orchestra. Simon Preston, organ and harpsichord; London Symphony Orchestra, André Previn, cond. [Christopher Bishop, prod.] ANGEL S 37441, \$7.98 (SQ-encoded disc). Tape: ♣ 4XS 37441, \$7.98.

Comparisons—organ concerto:
Alain, Martinon/Orch. National MHS 1595
Durufle, Prêtre/Orch. National Ang. S 35953
Comparisons—Concerto champêtre:
Veyron-Lacroix, Martinon/Orch. National MHS 1595
Van de Wiele, Prêtre/Paris Conservatory Ang. S 35993

Not many performers have had great success on records wearing more than one instrumental hat. Simon Preston has, and on this disc he performs Poulenc's vastly different organ and harpsichord concertos with remarkable finesse and sensitivity—greatly helped by the orchestral accompaniments and the excellent sound.

Particularly impressive is the Concerto for Organ, Strings, and Timpani, one of Poulenc's most serious nonoperatic compositions. It opens with a majestic, sometimes violent statement that could have been devised only by someone thoroughly familiar and in tune with the European cathedrals. Preston fully captures the drama of this initial outburst, while the EMI/Angel engineers have come up with just the kind of floor-vibrating, wall-shaking sound one rarely gets from an organ recording.

In the ensuing Allegro giocoso (the one-movement concerto can be broken up into seven sections), Previn and the London

Symphony stand out. Besides finding an ideal pace for the music, the conductor elicits crisp attacks and phrasing from the strings. Like Martinon (on Erato/Musical Heritage, October 1973), he pays close attention to the strong, exciting accentuations, both implicit and explicit. Previn goes somewhat beyond Martinon, it seems to me, in giving body and warmth to the music and Angel's reproduction of the string sound is the cleanest I've heard. I also found the balance between soloist and orchestra ideal. I would not want to part with the Angel recording made by Maurice Durufle, who premiered the concerto and helped establish the organ registration (the Durufle/Prêtre version is, furthermore, coupled with the best performance of the Gloria), but the Preston/Previn rendition is the one I will be most apt to play in the future.

The Concerto champêtre for harpsichord and orchestra, which belongs to Poulenc's first period, is so protean a work that it cannot even decide whether it is in a major or minor key: The first and third movements open in a D major that serves as a basis for no small amount of Scarlatti-esque banter, but by the end of each the key has switched to a D minor that seems almost lugubrious alongside the earlier goings-on—especially at the concerto's end, left entirely to the solo harpsichord. The effect resembles the mock seriousness of much of Les Mamelles de Tirésias, Poulenc's delightful one-act opera buffa (which, by the way, needs a new recording).

In the harpsichord part, Preston is a close second to Erato/MHS's Robert Veyron-Lacroix; Preston approaches the brighter pages just a tad too flippantly for my taste. But Previn's direction more than compensates: The phrasing of the constantly changing melodic lines, for instance, has a smoothness and depth nicely complemented by his careful definition of the harmonic structures. As in the organ concerto, both conductor and recording team have established a perfectly balanced rapport between the solo instrument and the orchestra. One of these days, though, I would like to hear the work performed on a bigger-sounding harpsichord than has been used in its three recordings. (Angel's Aimée van de Wiele fares worst in this department, though her interpretation is a fine one.)

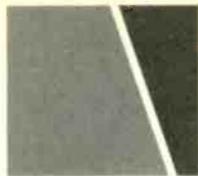
In both sonics and surfaces, this is the best release from Angel I have heard in some time, and art director Marvin Schwartz deserves loud cheers for using Henri Rousseau's marvelous but little-known Episode de la Guerre de 1870 on the cover.

R.S.B.

POULENC: Concerto for Two Pianos and Orchestra—See Bartók: Sonata for Two Pianos and Percussion.

PUCCINI: La Fanciulla del West.

Minnie	Carol Neblett (s)
Wowkle	Anne Wilkens (ms)
Dick Johnson (Ramerrez)	Plácido Domingo (t)
Nick	Francis Egerton (t)
Trln	John Dobson (t)
Harry	Paul Crook (t)
Joe	Robin Leggate (t)
Post Rider	Handel Owen (t)
Jack Rance	Sherrill Milnes (b)



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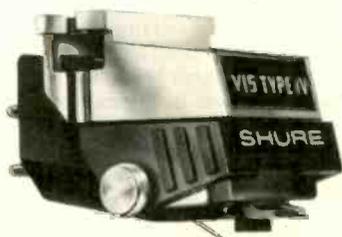
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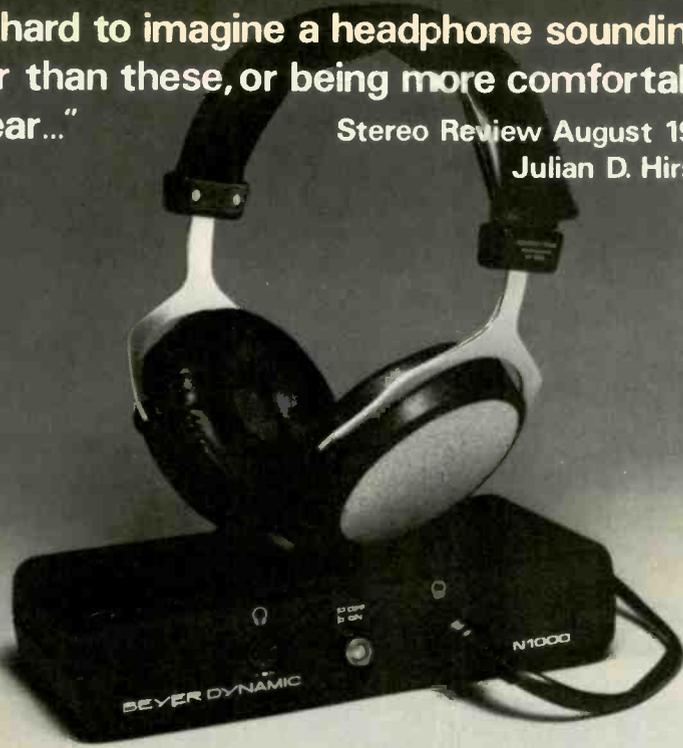
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Sonora	Jonathan Summers (b)
Sid	Malcolm Rivers (b)
Bello	Tom McDonnell (b)
Happy	William Elvin (b)
Ashby	Robert Lloyd (bs)
Jake Wallace	Gwynne Howell (bs)
Larkens	Malcolm King (bs)
Billy Jackrabbit	Paul Hudson (bs)
Jose Castro	Eric Garret (bs)

Chorus and Orchestra of the Royal Opera House, Covent Garden, Zubin Mehta, cond. [Hans Weber, Günther Breest, and Michael Horwath, prod.] DEUTSCHE GRAMMOPHON 2709 078, \$26.94 (three discs, manual sequence). Tape: ■■ 3371 031, \$26.94.

Comparisons:

Tebaldi, Del Monaco, MacNeil, Capuana	Lon. OSA 1306
Nilsson, Gibin, Mongelli, Von Matačić	Sera. SIC 6074

The first stereo recordings of *Fanciulla*, made in quick succession by Decca/London and EMI (preceded only by a Cetra mono), have served adequately for going on twenty years, and in truth the only serious loss in the gap between recordings was the Dick Johnson of Franco Corelli.

DC's new production, made in conjunction with the recent Covent Garden revival, is plausibly cast and conscientiously performed. But it's only when I return to the earlier recordings that my considerable affection for the piece is re-engaged. *Fanciulla* may be separated from Wagner's *Tristan und Isolde* by several orders of ambition and talent, but I am reminded of Conrad L. Osborne's observation: "In a way, there is only one acceptable sort of *Tristan* performance—a great one. Either it seizes the beholder with the particular fever and magic of the work (in which case weaknesses are irrelevant), or it doesn't (in which case strengths are irrelevant)."

Built into *Fanciulla's* grand exuberance and naiveté are two performance traps—one obvious, the other more subtle. The obvious one is that grand scale: For the first time, Puccini was writing unequivocally for voices of dramatic weight, and dramatic sopranos and tenors are never easy to come by. Minnie is a particular killer, calling for the lung power and stamina of a Brünnhilde, a sure Italianate legato, and the ability to project with strength in sustained writing at both range extremes—around both middle C and the C two octaves higher. I don't know whether such a singer ever existed, but the London and EMI a&r directors launched their recordings with pretty fair approximations in Renata Tebaldi and Birgit Nilsson. London even had a suitably heroic partner for Tebaldi in Mario del Monaco.

Assuming the casting problem is under control, there remains a formidable hurdle: tone. This problem takes several forms in *Fanciulla*, but most basic is the question of how we're to take the whole thing. It's easiest, and most common, to treat it as high camp: Bring Minnie on-stage with six-shooters blazing and don't look back; never mind the contradictions of this Bible-toting Amazon who's never been kissed—it's all a hoot. But can the opera work without an emotional investment in Minnie? Is there any point to the long scenes with Johnson if the audience is not swept up by the heroine's life-sustaining belief in the redemptive power of love?

Getting a fix on the protagonists doesn't wholly resolve the question of tone. Much

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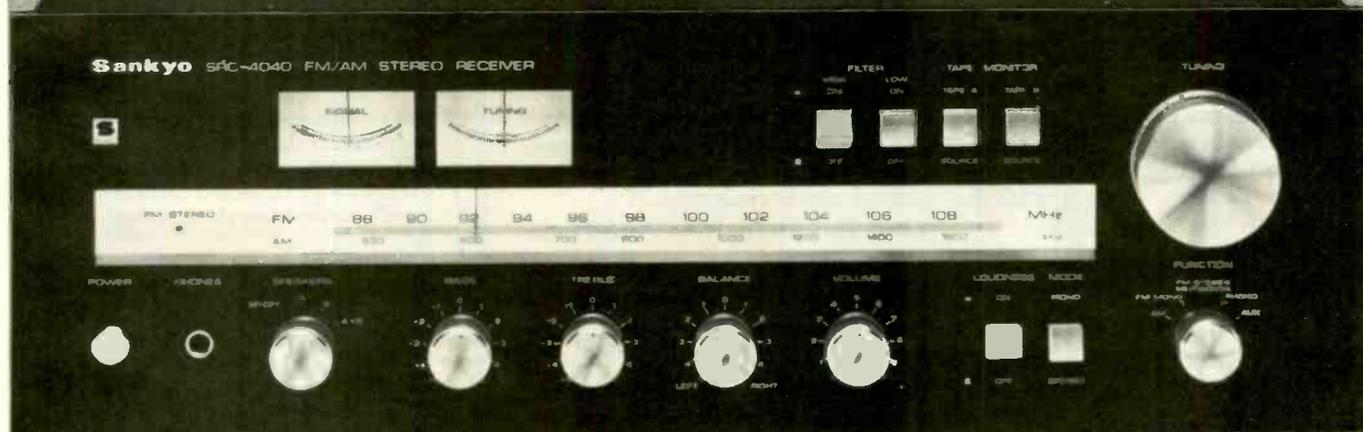
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of the opera's flavor depends on the large supporting cast; Minnie's motley cohorts must be cast and directed with the utmost care. If the miners, for example, emerge as merely an undifferentiated chorus, chunks of Act I fade into vague and tiresome caricature. If the bartender Nick fails to establish an identity, vital pieces of exposition and dramatic interaction in all three acts remain submerged in Puccini's rich web of sound. Even Sheriff Jack Rance, although nominally a principal, must make the most of fleeting solo opportunities.

"Fleeting opportunities" count for nearly everything in *Fanciulla*. The forward leap in Puccini's orchestral writing here—its

symphonic sweep and harmonic novelty—has been amply noted, but this can be misleading. Sweep is important, but no more so than minute characterization. Failure to seize all those individual moments makes the score sound more episodic, less consistently inspired, than I think it is.

It's symptomatic of the DG performance that one of my favorite moments passes without a ripple. In Act I, when the miners are set to hang the hapless Sid after catching him cheating at cards, the sheriff intercedes and proposes a more humiliating punishment, but he does so in a startling way. "Cos'è la morte?" he asks, and then expands: "What is death? A kick in the dark

and good night!" Those four bars (not even enough to call an *arioso*) can resonate for the rest of the evening and beyond if the baritone cares to make something of this sudden and surprising glimpse into Rance's soul. (EMI omits this whole episode!)

All the DG singers have the notes reasonably well in place. Carol Neblett gives a gutsy account of the title role and is certainly more secure on top than Tebaldi (though not Nilsson). While I wonder about the long-term effect of the vocal configurations required to make her voice sound as close as it does to the proper weight, that should not concern us unduly here. What does concern me is the inevitable lack of ease, freedom, thrust. This puts Neblett at an immediate disadvantage in the role's more strenuous passages (to pick only the most obvious example: her outpouring after learning Johnson's identity in Act II, "Vieni fuori, vieni fuori, vieni fuori," rising to a potentially spine-tingling B flat—page 208 of the Ricordi vocal score), but it tells too in the quieter moments.

Healthy big voices scale down in a quite special way, as witness Tebaldi's repetition (near the end of the Act I duet, page 144), quietly weeping, of her earlier self-characterization as "humble and good for nothing"—starting on the F above middle C (i.e., a semitone above the break) and descending, in chest register, down to B flat before settling on D ("nulla"). (Healthy dramatic voices also have a command of the chest register which is freely exploited by composers writing for such instruments.) It's Tebaldi's artistry that makes this moment—and so many others in the role—unforgettable, but it's her basic vocal structure that makes it possible. Nilsson is less personal, but there's a matchless thrill in hearing that Nordic powerhouse slash through the music.

Few listeners will complain about the sounds that Plácido Domingo makes, but he's in only fair shape vocally, and he's operating at lower voltage than Neblett, which makes it harder to ignore the basic insufficiency. Without a dramatic tenor's hefty midrange and ringing top, much of the writing in the duets can sound like endless note-spinning. Listen to Del Monaco's "Non so ben neppur io quel che sono" in the Act I duet (pages 126-27), and in particular the juicy eight repeated E's (i.e., smack on the break) on the line "Certo anche voi l'amate, ma non avete tanto vissuto." EMI's João Gibin, although a less accomplished singer than Domingo, is also a better fit for the role.

Sherrill Milnes has the equipment for a sensational Rance, but he makes little of the part. (He was not in the Covent Garden cast, incidentally.) There are nice moments, like his sharp-tongued handling of Johnson's first entrance, but there is too much huffing and leering as a substitute for characterization—and the voice here is no special pleasure to hear either. Both Cornell MacNeil (London) and Andrea Mongelli (EMI) use their vibrant baritones to excellent effect, and Mongelli is especially lively.

DG has a fine pair of basses, Robert Lloyd and Gwynne Howell, for the Wells Fargo agent Ashby and the minstrel Jake Wallace. Nick, however, is entrusted to the compe-

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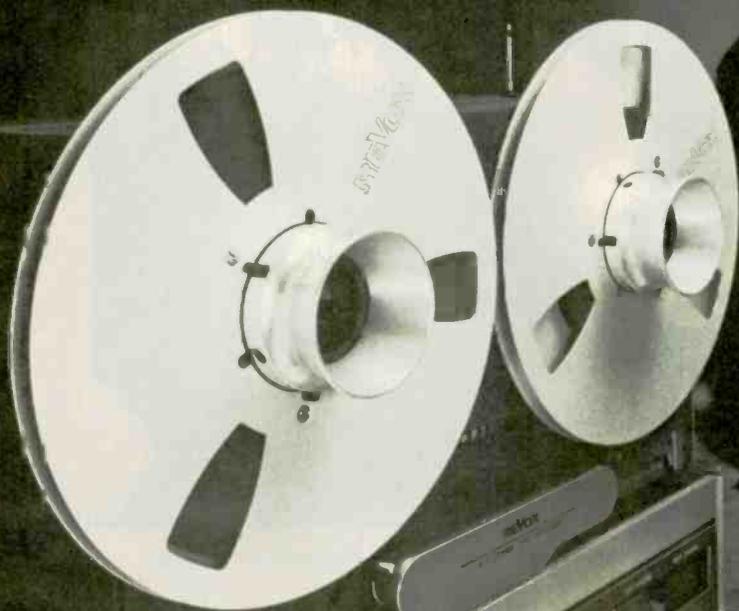
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DG/Barda

Neblett, Milnes, Domingo, Mehta—not quite equal to Fanciulla's demands

tent but colorless Francis Egerton, while that excellent character tenor Paul Crook is buried among the miners. The British supporting cast as a whole is adequate without challenging the strong, idiomatic ensembles of the earlier recordings.

If Zubin Mehta deserves credit for the solid efficiency of the performance, he must also shoulder some responsibility for its lack of character and impact. Franco Capuana's London reading, which starts with the advantage of an outstanding cast, is satisfying in all particulars, and Lovro von Matačić's for EMI is even better—he has an exemplary feel for both large contours and detail and gets the very best from his Scala forces. I would hate to be without either the London or the Seraphim set (the latter's budget price partly offset by the absence of printed texts), and both of them seem to me at least as well recorded as the DG. Undoubtedly, however, many listeners will not share my reservations about the latter, which is altogether competent and also has the virtue of completeness. (The minor cuts of the earlier sets don't much bother me, with the exception noted above.) K.F.

SCHUMANN: Nachtstücke, Op. 23—See Brahms: Piano Works, Op. 116.

SHOSTAKOVICH: Quartets for Strings: No. 4, in D, Op. 83; No. 12, in D flat, Op. 133. Fitzwilliam Quartet. [Peter Wadland and Raymond Ware, prod.] OISEAU-LYRE DSLO 23, \$7.98.

B SHOSTAKOVICH: Quartets for Strings: No. 1, in C, Op. 49; No. 3, in F, Op. 73. Gabrieli Quartet. [Michael Woolcock, prod.] LONDON TREASURY STS 15396, \$3.98.

Although the Twelfth Quartet, completed

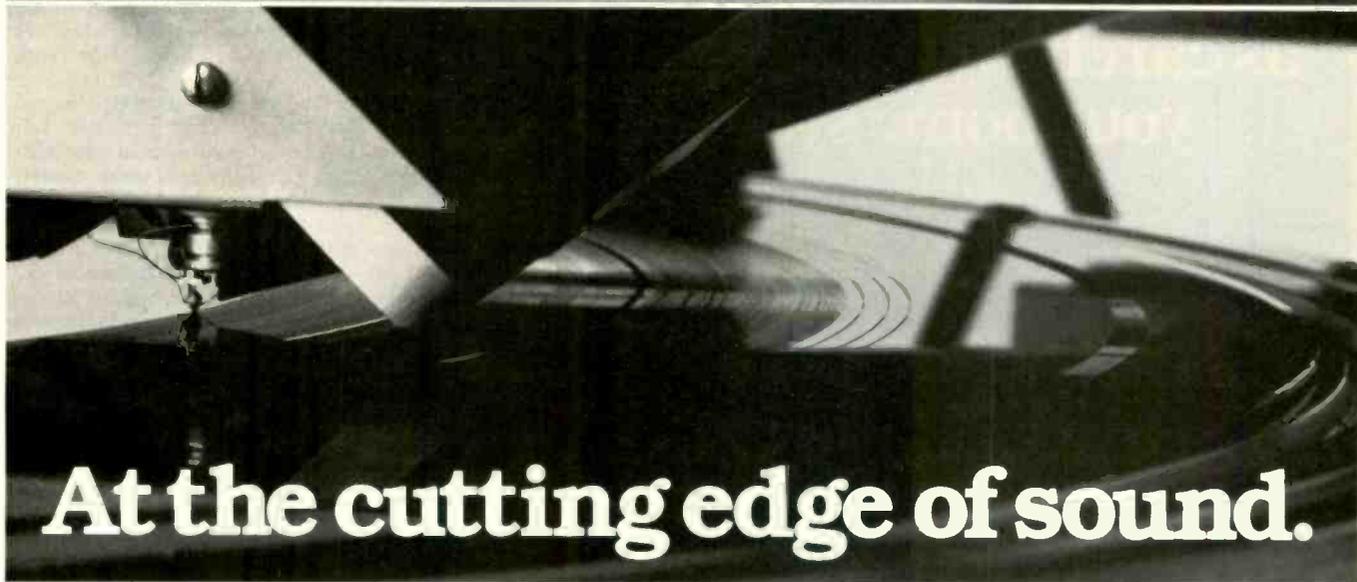
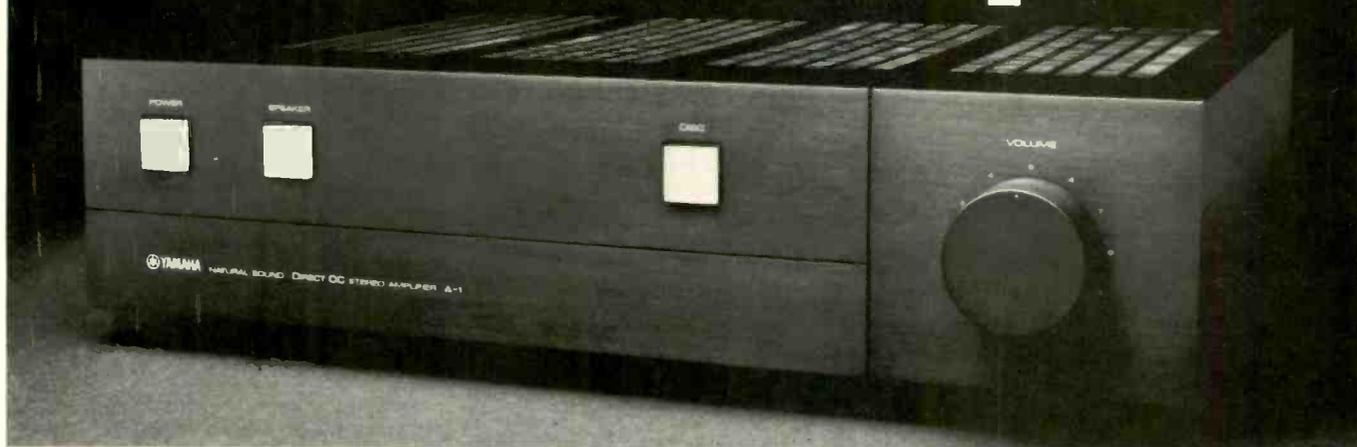
in 1968, has been recorded by both the Beethoven and the Borodin Quartets in the Soviet Union, the Fitzwilliam version marks its first appearance in SCHWANN. The gap filled is an important one, since the Twelfth occupies a unique position in the composer's oeuvre. Here Shostakovich, perhaps inspired by the quartet's number, makes the most explicit use of tone rows to be found in any of his works, even though twelve-tone themes can be noted here and there in other pieces, not to mention the countless chromatic melodies that appear at the outset of his career.

Characteristically, Shostakovich attacks the problem from its broadest possible angle: The tone rows serve less as a point of departure for harmonic and melodic structures than as a point of contrast, so that the entire work becomes a battleground pitting atonality against tonality. Even the opening row, played on the solo cello, starts on an upbeat and concludes with a descent from A flat to a downbeat D flat, thus establishing the D flat major tonality into which most of the mellow first movement fits quite comfortably.

The ensuing scherzo does not assert its tone row as forcefully but remains from start to finish a work of perfect and thoroughly abrasive nontonicity. But by the end of the quartet, the scherzo's principal motif returns in tonal garb and the first movement's opening tone row, forgetting the tonality it had sneakily introduced, does its best to get the upper hand. Tonality is the ultimate victor, but not before the opposing camps have virtually switched identities!

On another front, the Twelfth Quartet does battle with the whole concept of movements. Ostensibly composed in two movements, the quartet has a finale that subdivides into four substantial movements. The manner in which the thematic

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material is arranged, however, makes it possible to view the entire work as a single-movement sonata allegro. Although one musicologist has compared this with the formal design of Schoenberg's First Chamber Symphony, the formal device also strongly recalls the B minor Piano Sonata of Liszt, a composer who had no small influence on Shostakovich.

It is hard to find fault with the Fitzwilliam Quartet's performance of this work, a difficult piece to communicate if ever there was one. Particularly in the more vigorous sections, such as the scherzo, the sharpness of the attacks and the rhythmic precision generate tremendous excitement

while cutting straight to the bone. In comparison, the version by the now-disbanded Borodin Quartet sounds quite meek, and even the more incisive performance by the Beethoven Quartet does not reach the intensity of the Fitzwilliam's. There are those who may prefer the Borodin's more romantic approach to the first movement (complete with portamentos), where the Fitzwilliam is just a bit too straightforward. But I find the latter, if a bit cold, more faithful to the score. (Interestingly, in all three recordings the solo cellist introduces a rubato whenever the opening tone row appears, although none is indicated in the score.)

Compared to the Twelfth, the other quart-

tets on these two recordings seem remarkably uncomplex, at least formally. Yet in the fifteen Shostakovich quartets there is a sense of continuity lacking, for instance, in his fifteen symphonies, so that much of what will later transpire in the middle (Nos. 7-11) and late (Nos. 12-15) quartets is already announced in the early ones. Always concerned with broader effects, in Nos. 1 and 4 Shostakovich has whole movements played on muted strings, as he was to do several more times, including an entire section of No. 12's finale. Like many of the later quartets, the Fourth, after a deceptively lyrical first movement, ultimately dies away to a threadbare pianissimo in which a minimum of material defines a bleak, open musical space. In the Third Quartet, with its blatant chromaticism and its often audacious polytonality, one hears much of the modernism that is particularly apparent in the lean textures of Shostakovich's chamber music style. (The manic energy of the quartet's third movement also foreshadows the even more frenetic scherzo of the Tenth Symphony.)

Only in the First Quartet (1938) does one sense directions that might have been followed but were later abandoned. The writing is in more conventional string-quartet style, with inner and outer voices balanced nicely against each other, creating a sense of flow that grows naturally from the skillful part-writing. Shostakovich remains recognizable throughout—the second movement, for instance, is a characteristic variations-quasi-passacaglia with a theme suggestive of the one later used in the finale of the Second Piano Sonata—but the First Quartet has perhaps the least distinctive profile of the fifteen. By the Third, Shostakovich had given up this style in favor of the melody accompaniments, unorthodox pedal points, solo recitatives, chordal melodies, and small groupings that pervade all the later quartets.

The Fitzwilliam is most impressive in the Fourth, once past the first movement—a bit dry and glib for my taste. In the rest of the work, the vigor and sharpness work constantly to the music's advantage. The perfect allegretto pacing of the finale helps the Fitzwilliam turn the movement from a simple peasant dance into an Expressionistic grotesquerie.

The Gabrieli Quartet, also English, is a revelation. Each member is an excellent instrumentalist, an important attribute considering the way Shostakovich's minimalist textures often throw single instruments into almost naked relief; note Ian Jewel's beautiful viola solo at the beginning of the First Quartet's second movement. In both the First and Third, these consummate soloists produce performances characterized by perfectly blended tones, pinpoint ensemble accuracy, and single-mindedness of outlook, and they perform with a fidelity to the scores that reveals profound understanding of the music.

The sound on both discs is excellent, with the Gabrieli more closely miked. The jacket notes by Alan George and Hugh Otway are an added plus. R.S.B.

Continued on page 132

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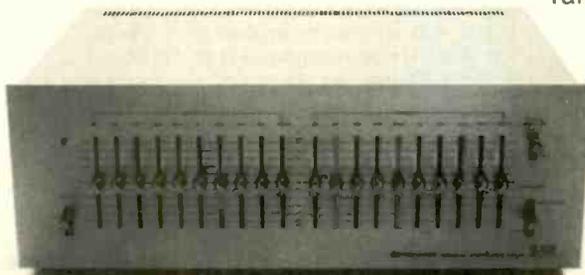
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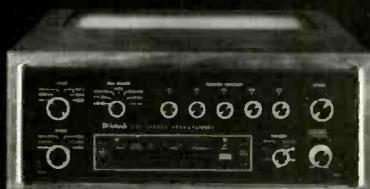
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STRAVINSKY: Concerto for Two Solo Pianos; Sonata for Two Pianos—See Bartók; Sonata for Two Pianos and Percussion.

STRAVINSKY: Pulcinella: Suite. Scherzo fantastique, Op. 3. Symphonies of Wind Instruments (original version). New York Philharmonic, Pierre Boulez, cond. [Andrew Kazdin, prod.] COLUMBIA M 35105, \$7.98. Tape: ●● MT 35105, \$7.98.

With minimal fanfare, Columbia and Pierre Boulez here make a significant addition to the Stravinsky discography: the first recording of the *Symphonies of Wind Instruments* in their original 1920 form—a form never published except in piano reduction, superseded since 1947 by the composer's revision.

The changes made then, dealing mostly with details, are nevertheless significant. First, the instrumentation was simplified, primarily by the elimination of the alto flute and the changing of an alto clarinet to a regular one; this necessitated some adjustments in the scoring, and also some modifications of the music. Still other changes of this sort were made for purely compositional reasons. An inconsistency in the tempo directions was ironed out, the whole piece re-barr'd in shorter units to facilitate performance, and many details of phrasing radically changed.

Though the overall image of the *Symphonies* was not tangibly altered, the revision still constitutes a fascinating specimen of Stravinskian self-criticism, and it's good to have at last the possibility of audible comparison. What's more, this is a first-rate recording; the Philharmonic plays well (if without quite the tonal sheen and ensemble finesse of the Netherlands Wind Ensemble on Philips 6500 841—easily the best version of the revised score), and Boulez keeps a firm hand on the tempos (correcting the aforementioned error in the earlier score's markings).

Also welcome is this clean, elegant performance of the early *Scherzo fantastique*, a showy, proficient, not very individual example of the composer's early manner. (Stravinsky's own recording, on Columbia MS 7094, was rather less well played, and is now out of print; there is no other competition.)

Finally—and not least—Boulez makes something more transparent of the *Pulcinella* Suite than any previous conductor, thereby clarifying cross-rhythms and brief harmonic clashes that add to the score's pungency. The Philharmonic's winds are in splendid shape here: A special word is due in praise of Harold Gomberg's personal and masterful playing of the oboe solos, and Gerard Schwarz sails through the trumpet part with unequalled aplomb (solo credits would have been appropriate on the liner, I think). Throughout the record, the sound is bright, clean, and a pleasure to hear. D.H.

VIVALDI: Scared Works, Vols. 1-2. For a feature review see page 99.

WAGNER: Das Liebesmahl der Apostel.

BRUCKNER: Helgoland. Ambrosian Male Voice Chorus, Symphonica of London, Wyn Morris, cond. [Isabella Wallich, prod.] PETERS INTERNATIONAL PLE 043, \$7.98. Tape: ●● PCE 043, \$7.98.

Of *Das Liebesmahl der Apostel*, composed for a choral festival in Dresden in 1843, Wagner wrote that "I do not mind including it in the list of my uninspired compositions. But I was not displeased with it when it was done . . ." adding, however, that the 1,200 singers produced a "comparatively feeble effect" at the premiere. As Jack Diether intimates in his liner notes, Wagner might have found the effect more impressive in this modern recording, although it certainly utilizes far fewer than 1,200 singers. Except for the frequently dubious ensemble of the group singing the line of the twelve apostles in this version of the Pentecost (text by Wagner himself), the choral sound is really impressive, and Wyn Morris shapes the piece with a sure hand. But Wagner's promising beginning soon peters out into routine gestures, and the coda (when the orchestra finally enters, after more than twenty minutes of tactful silence) is little more than perfunctory.

For all that, recordings such as this are one of the primary justifications of the phonograph; they enable us to fill in our aural images of the great composers by hearing their lesser works—of which this is certainly a prime example. Yet another recording of *Das Liebesmahl* is on the way, from the Westminster Choir and the New York Philharmonic, Pierre Boulez conducting; it will have to be remarkably fine to supersede this one, however, and its promised coupling—the *Siegfried Idyll*—is not likely to fill a gap in anyone's collection.

Whereas Morris' recording of Bruckner's *Helgoland*—another discographic first—will certainly do that. This is a really impressive piece, despite the trite text (describing an attempted Roman invasion of the North Sea island, frustrated by a storm). A late work (1893), it is at once spacious and vigorous—a combination that Wagner did not quite manage fifty years earlier. The recording is full and forceful, as is the performance; once or twice the words of the chorus are swallowed up by the orchestra, but I like the overall concert-hall feeling of the recording.

In addition to Diether's characteristically informative notes, texts and translations are provided on the double-fold jacket. My only complaint is that for the Bruckner they aren't set side-by-side, presumably in order to make room for a large photo of the conductor—a vanity curiously out of tune with the record's other virtues. D.H.

Recitals
and
Miscellany

LEONARD PENNARIO: Daydreams. Leonard

Pennario, piano. [Patti Laursen, prod.] ANGEL S 37303, \$7.98. Tape: 4XS 37303, \$7.98.

DEBUSSY: Images, Set I. **FAURÉ:** Pavane, Op. 50. **GRANADOS:** Goyescas: Quejas o la maja y el ruiseñor. **POULENC:** Pastourelle: Mouvements perpétuels (3). **RACHMANINOFF:** Vocalise, Op. 34, No. 14. **RAVEL:** La Valse. **SATIE:** Gymnopédie No. 1.

This collection, the first new Pennario disc to reach me in some years, contains a number of pieces of the sort in which he may without warning ignite and make clear how fine a pianist he is.

Foremost among them is Ravel's fiendishly difficult piano arrangement of *La Valse*, of which Pennario made the pioneering recording in the Fifties. His remake is notable for detail, symphonic steadiness of rhythm, powerful tone at climaxes, and absence of sentimentality. Abbey Simon (in his survey of Ravel's piano music, Vox SVBX 5473) displays more color and a comparably inclusive grasp of the figurations but weakens his performance with arch rubatos and subito pianos. Ruth Laredo (Connoisseur Society CS 2005) also plays *La Valse* more coloristically than Pennario, and her similarly unaffected reading boasts a beguiling natural lyricism. Yet in the long run it is Pennario who best realizes the music's sardonic grotesquerie. I would go as far as to say that this performance compares favorably with the finer accounts in full orchestral garb.

Pennario was initially to record only the predictable "*Reflets dans l'eau*" but decided on the spot to do the whole first set of Debussy's *Images*. It is fortunate that the recording producer concurred: The final "*Mouvement*" has particular swirl, and all three pieces are performed on a high level—even if they are not quite as colorful or warmly emotional as Rubinstein's 1961 Carnegie Hall concert version (RCA LSC 2605). Similarly, Pennario's way with the witty Poulenc *Mouvements perpétuels* is clear-cut and sympathetically idiomatic even if it lacks the patrician tapered line of Rubinstein's version (RCA LSC 2751) or the moist ambience of the composer's own (*Odyssey Y 33792*). Pennario's slightly bland, unruffled ease suits the soporific Satie *Gymnopédie* No. 1 and Fauré Pavane, though in the Rachmaninoff "Vocalise" and Granados "*Quejas o la maja*" one ideally looks for more phrase tension and tonal contrast.

The sound is close, realistic, and a bit studio-bound. H.G.

RUDOLF SERKIN: On Television. Rudolf Serkin, piano. [Thomas Frost, prod.] COLUMBIA M2 34596, \$15.98 (two discs, manual sequence) [recorded in concert, December 14-15, 1977].

HAYDN: Sonata No. 59, in E flat. **MOZART:** Rondo in A minor, K. 511. **BEETHOVEN:** Sonata No. 26, in E flat, Op. 81a (*Das Lebewohl*). **SCHUBERT:** Sonata in B flat, D. 960.

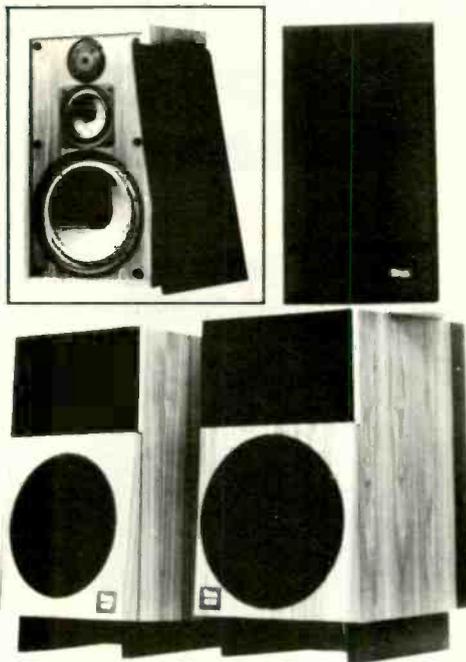
This set mostly preserves the recital that Serkin played for television cameras before an invited audience at Carnegie Hall last December 15. He had, however, performed the same program the night before, and with the two appearances (and perhaps some of the afternoon warmup for the sec-

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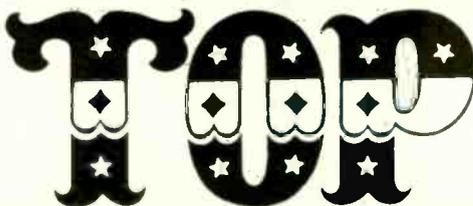


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CIRCLE 36 ON PAGE 141

ond evening as well) Columbia presumably had enough material to satisfy the perfectionist in this greatly respected artist.

Sometimes an effective concert performance fails to make a comparable effect as a recording; in this instance the opposite is true. Readers may remember my rather caustic reference to these performances in my review of Odyssey's Serkin/Busch collection (Y3 34639, June 1978), but, however deliberate or cut-and-dried they seemed in the hall, they make an altogether happier impression on disc. For one thing, Serkin's problematical piano sound has rarely been so flatteringly captured in recent times. Here one hears an attractive luminosity of sound in the soft passages, with a halo of ambience around the tone; at full volume, as in the climaxes of the Beethoven *Lebewohl* Sonata, there is a rich, almost orchestral plangency. The version of the Schubert B flat Sonata that Serkin taped in Vermont a few years ago (Columbia M 33932, June 1976) may be a shade richer in hue, but it sounds cramped and opaque alongside this more natural concert-hall reproduction.

All of these performances grow more attractive with greater familiarity. The Haydn E flat major Sonata is a shade rarefied and otherworldly for so intimate and earthy a creation, but the Mozart A minor Rondo unfolds with an engaging mixture of sensuality and rigor. One might prefer Schnabel's more robust sound and faster tempo, or Landowska's more Chopinesque approach, yet Serkin is not without poetry and color, even if these ingredients are subordinated to a purposeful harsh angularity.

It is good to have Serkin's *Lebewohl* on records again. (His early-Fifties account has long been out of print, and one he recorded several years ago in England has evidently failed to win his approval.) Again he plays down charm, instead favoring broad tempos and a no-nonsense, swinging momentum that contrasts instructively with the superficially similar but more fustian account of his former pupil, Anton Kuerti. The Schubert remains essentially what it was: a bit too spiky and angular, too insistent in its stress on every downbeat for maximum exalted effect, but the line flows more freely this time, and the tempo seems just a shade more mobile.

Though there are tiny technical blemishes, the spontaneity of these live performances more than compensates; whatever one's reservations, one always knows that a great artist is at work. H.G.

MARTIAL SINGHER: French Song Recital. Martial Singher, baritone; Dorothy Angwin, piano. 1750 ARCH RECORDS 1766, \$7.98.

DUPARC: Phidylé; Le Manoir de Rosemonde; Chanson triste; La Vie antérieure. **RAVEL:** Chants populaires; Nicolette. **DE LARA:** Rondel de l'adieu. **CHAUSSON:** Le Colibri; Les Papillons; Le Temps des lilas. **BRITTEN:** French Folk-song Arrangements (5).

CHAUSSON: Poème de l'amour et de la mer. **DUPARC:** Songs. Janet Baker, mezzo-soprano; London Symphony Orchestra, André Previn, cond. [Christopher Bishop, prod.] ANGEL S 37401, \$7.98 (SQ-encoded disc).

DUPARC: Phidylé; La Vie antérieure; Le Manoir de Rosemonde; Au pays où se fait la guerre; L'invitation au voyage.

That Martial Singher enjoyed a thirty-year operatic career is hardly surprising. The present recital, recorded in 1976, seventeen years after his last performance at the Met, is a testimony to the soundness of his vocal method, which meets virtually all the demands of this technically far from easy material.

Nature, on the other hand, will not be denied, and it must be said that the actual quality of the sound available to Singher at the age of seventy-two occasionally leaves something to be desired. For example, music at the top of the staff that requires either forceful or sustained projection tends to be somewhat uneasy for him. Thus the climax of Duparc's "Le Manoir de Rosemonde" is underpowered and that of "Le Temps des lilas" (on the word "Las!") is something of a strain. But these are momentary flaws. Only in one song, the high-lying "Le Colibri," does he seem generally out of his element (though it is true, too, that the Spanish song in Ravel's *Chants populaires* could do with fewer aspirates and the Italian song with a warmer, easier sound).

In most of these selections, however, the voice is in excellent shape, drier than in the singer's youth, of course, but still capable of achieving beautiful effects—like the fine, sustained tone that concludes "Le Temps des lilas" (the final section of Chausson's orchestral cycle *Poème de l'amour et de la mer*, arranged by the composer for voice and piano) and the dark plangency of Singher's delivery in Duparc's "La Vie antérieure." But above everything else this recital is notable for Singher's artistic communicativeness. Nearly all of these songs come vividly to life. Among the most noteworthy of his performances is Ravel's antiromantic "Nicolette," in which each of the girl's suitors is brilliantly characterized (she chooses the oldest of them—ugly, vile, potbellied, but rich). Britten's charming arrangements of French folksongs, too, are very fine, especially "Le roi s'en va-t'en chasse" and "Quand j'étais chez mon père." The difficult accompaniment to the latter piece is well played by Dorothy Angwin, who is excellent throughout and ought, I think, to have been named on the front of the album.

Dame Janet Baker's new disc does nothing to improve the situation with respect to good up-to-date recordings of French art songs. No current performance of Chausson's exquisite *Poème de l'amour et de la mer* can be recommended wholeheartedly (the competition includes De los Angeles and Caballé), and the septuagenarian Singher's 1750 Arch disc is now the only artistically satisfying account of Duparc *mélo-dies* listed in SCHWANN-1.

As already noted, Singher's recital also features a marvelously vivid interpretation of the piano-accompanied version of the final section of the Chausson cycle. It is not easy, however, to think of a present-day singer who could do justice to the entire work in its original orchestral form. What it requires is good legato, sustained purity of sound, an idiomatic and expressive way with the French language, variety of tonal color, and a sensitive, highly refined instinct for lyrical drama—qualities in which

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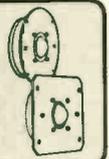
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Dame Janet, so far as I'm concerned, is for the most part deficient. For all her renown in the French repertoire, I cannot hear anything in this recital but pedestrian dilligence.

To my ears her small and colorless mezzo has virtually nothing in the way of interpretive range. In both the Chausson cycle and the Duparc songs (performed in the composer's own orchestral versions) she seems able to avail herself of only five expressive options: She can sing softly, at full voice, and a little louder than full voice; she can sing in tune; and she can sing flat. Here she is mostly flat, by which I mean that she chooses to employ for dramatic effect a tonal production with an excessively narrow vibrato, the result being that much of her singing is fractionally under true pitch. Thousands of listeners, I am aware, do not mind this—find it, in fact, moving. I find it unendurable.

Nor am I able to see compensatory vocal or interpretive qualities in these performances. Some of the Chausson strains Baker's resources to the limit. In the high-lying climaxes her singing develops a strong, unpleasant beat. In the balladlike "Au pays où se fait la guerre" she quite misses the sense of breathless expectation as the woman wonders if her lover is returning from the wars and her subsequent desolation when she realizes that the footsteps on the stairs are not his. All I see here, in other words, is inferior artistry, an inability to project the essential values of this superb music. To turn from Dame Janet's recital to Dame Maggie Teyte's old recordings of *Poème de l'amour et de la mer*, "L'Invitation au voyage," and "Phidylé" (all included in EMI's Teyte retrospective, RLS 716, imported by Capitol Imports and Peters International)—as I did for consolation and relief—is to have one's imagination reawakened, to rediscover within the narrow compass of the *mélodie* whole vistas of meaning and feeling not in the younger singer's grasp.

Both discs are well recorded (although the Angel tends to congestion at the climaxes), and both include texts and translations. The Singher recital, at least, is highly recommended. D.S.H.

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CAPRICORN ONE. Original film soundtrack recording. Composed and conducted by Jerry Goldsmith. WARNER BROS. BSK 3201, \$7.98. Tape: ●● M 53201, \$7.97; ●● M 83201, \$7.97.

THE SWARM. Original film soundtrack recording. Composed and conducted by Jerry Goldsmith. [Jerry Goldsmith, prod.] WARNER BROS. BSK 3208, \$7.98. Tape: ●● M 53208, \$7.97; ●● M 83208, \$7.97.

Is Goldsmith's score for *Damien: Omen II* a first? Many composers have written works that follow the liturgy of the Catholic Mass, but has anyone ever composed a "black Mass" (as the *Omen II* album is subtitled)?

If there is a fixed order for a black Mass, I am not aware of it. But the music certainly creates, over its ten movements, the feeling and atmosphere appropriate to a ceremony of evil. Unlike Goldsmith's Academy Award-winning *Omen* score (Tattoo BJL 1-1888, October 1976), *Omen II*, which uses a fair amount of the same material, has no lyrical theme to balance its general gloom. The chorus sings throughout, sometimes chanting in Latin, sometimes snarling out sounds that seem more animal than human. In the cut entitled "Runaway Train," the composer ingeniously combines a classic railroad-style accelerating ostinato with the choral chanting to produce an unsettling combination of suspense and evil.

Damien: Omen II does not, however, quite reach the level of its predecessor. A certain spark of conviction seems missing this time around, and the new arrangement of the "Ave Satani" theme (certainly the most offbeat number ever nominated for a best-song Oscar) lacks a good deal of the original's punch. Still, in terms of originality and musical quality, *Omen II* attains a level rarely hit in film music, and it is a shame Goldsmith did not get a vehicle more worthy of his efforts.

In August, I called Goldsmith's *Coma* (MGM MG 1-5403) one of the best scores of the year, and even that is perhaps surpassed by his *Capricorn One*. Orchestrated principally for brass, strings, and percussion, the new score features stunning title music, the opening of which depends entirely on tense ostinatos, excitingly syncopated figures, and brilliant instrumentation. A second episode is built on "Kay's Theme," a string countermelody woven around a lovely four-note motif repeated in descending harmonies. This is one of the composer's most haunting melodies, and it rounds out the score much more convincingly than the love theme did in *Coma*.

The remainder of *Capricorn One* derives mostly from the music heard in "Main Title," but with enough variety to hold the listener. Note, for instance, the poignant arrangement of "Kay's Theme" for piano, harp, and vibraphone in the "Bedtime Story" cut. Only in the mild disco version of this theme are the standards lowered.

Goldsmith's music for Irwin Allen's *The Swarm* is cut from much the same cloth and even makes fairly literal use of one of *Capricorn One*'s principal ostinatos. There is a nearly six-minute sequence, "The Bees Arrive," in which he sustains a pitch of suspenseful, pulsating intensity that can all but exhaust the listener, and there is also a convincing triumphant finale. But with its de rigueur chromatic trills and other stock devices, *The Swarm* has nothing like the impact of *Capricorn One*, even though the

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recognizable Goldsmith strains still offer quite a bit of absorbing listening. The promo-hype liner notes by Tony Habeeb are ludicrous.

It would be interesting to know whether Goldsmith produced the *Capricorn One* album; its fine, dynamic sound is considerably better than that of the other two, which he did produce. I might add that I have not recently had a Warner Bros. jacket that has not come completely unglued. R.S.B.

HOLOCAUST. Suite from the TV film score by Morton Gould. National Philharmonic Orchestra, Morton Gould, cond. [Charles Gerhardt, prod.] RCA RED SEAL ARL 1-2785, \$7.98. Tape: ARK 1-2785, \$7.98; ARS 1-2785, \$7.98.

Regardless of one's feelings about the TV miniseries *Holocaust*, Morton Gould's thoughtful score needs to be approached independently. Although Hollywood has found little use for the versatile and idiosyncratic Gould, he has made important contributions to the film-music field, most notably his voluminous and multifaceted music for the recent *World War I* TV series, in its own way as impressive in scope and period flavor as the better-known Richard Rodgers-Robert Russell Bennett *Victory at Sea*.

For a subject as anguished and calamitous as the holocaust, Gould has refrained from indulging in the portentous and hysterical melodrama a more conventional Hollywood composer might have fallen back on. (As a matter of fact, relatively little of the score was audible during the telecasts.) The main theme is an appropriate and affecting threnody that rises to a brief climax of Hebraic lyrical intensity, an element that has always lain just beneath the surface of Gould's usually more extroverted and rakish musical personality. The several love themes grow out of his gift for creating berceuselike melodies of almost piercing tenderness and nostalgic longing, which also evoke the fragile Old World simplicity and security that were rudely shattered by the Nazis.

The longer and more dramatic sequences—a Kurt Weill-ish mélange of Nazi march and German folksong for the "Kris-tallnacht" (which displays Gould's characteristic flair for wind and brass writing) and a Slavic funeral march in an implacable Shostakovich-like crescendo rhythm for "Babi Yar"—stand in chilling relief against the predominant tone of lament and commemoration. The final section is a brief but poignant "Elegy" composed especially for this recording; it epitomizes the unsentimental sincerity and melodic freshness of the whole score.

This is not a soundtrack album made up of disjointed, fragmentary cues, but a concert suite conceived symphonically and offering considerable variety in mood and contrast in texture. The handsome playing of the National Philharmonic and the spacious engineering are familiar from RCA's "Classic Film Scores" series, and the jacket lists full credits and cast for the TV production, with a synopsis of the story enclosed. P.A.S.

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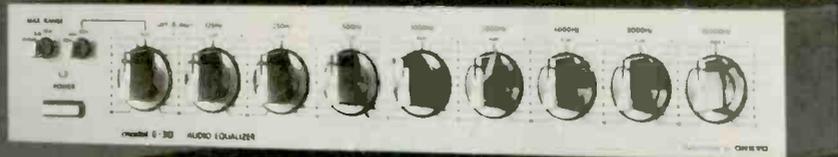
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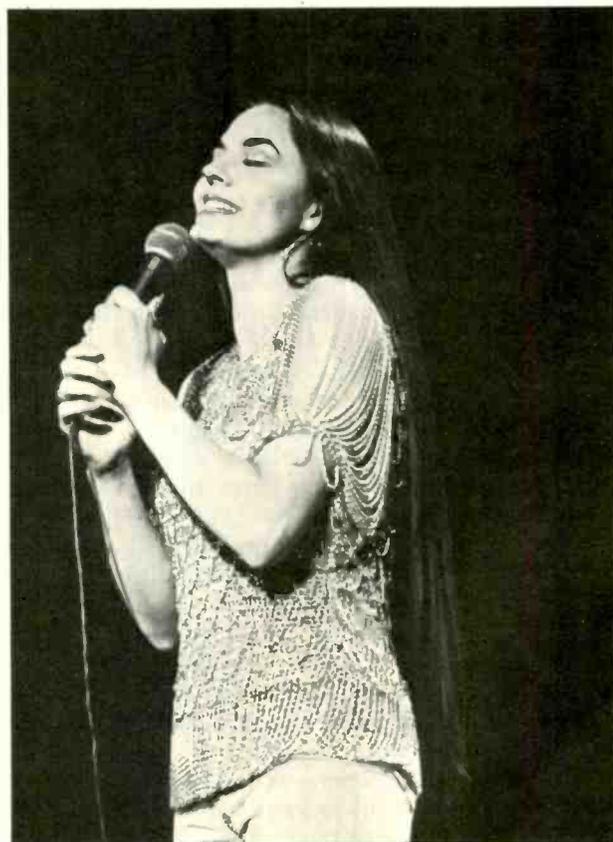
Backbeat

Crystal Gayle: "I Just Want to Make Good Music"

by Sam Graham

Crossing over can be a pyrrhic victory for a country singer. Country fans are a loyal breed, yet they can bare their fangs like a pack of cornered wolves at the slightest sign of betrayal. Dolly Parton, by virtually announcing that she intended to be a pop star, alienated a portion of the Nashville faithful. Despite her protestations to the contrary, they reckoned she was leaving them behind in a cloud of synthesizers, fuzz tones, and keening strings.

Crystal Gayle says she didn't *plan* on crossing over, which may explain why she, more than Parton and others, is now reaping the platinum rewards at the top of the pop charts. When she sings the bluesy and alluring *Don't It Make My Brown Eyes Blue*, last year's Grammy-winning ballad, she sounds neither awkward nor out of her element. She sounds, instead, like a young singer who was raised on the records of Billie Holiday, Lesley Gore, and Brenda Lee, as well as those of her sister Loretta Lynn. There's one element that is hers alone, and it is the chief reason for her facility in all genres. More than tasteful song selection or Allen Reynolds' smooth, understated production, it is the quality of her voice. An often surprisingly big sound for a woman of such diminutive proportions, her instrument is both sultry and ingenuous-sounding, warm and playful. This voice could charm the truth out of Richard Nixon or seduce a eunuch. It could sing the *Congressional Record* in Pig Latin and melt your heart. And it enables its owner to deliver



Cole Porter's *It's All Right with Me*, Ian Tyson's *Someday Soon*, and a folk standard like *Wayward Wind* with equal grace and assurance.

Crystal falls back on a cliché in talking of her success, but it is an accurate one. "I just want to make good music," she explains. "I've always been a singer, not just a country singer, or pop, or whatever. My roots are country, but as a child I sang everything. I never tried to label myself 'til I got into the business and everybody else was labeling me. I know my sister is country, and she says she'll never sing anything else. But I grew up with show tunes, cabaret—all of it. Maybe that's why there hasn't been this big fanfare of saying, 'Hey, I want a pop record,' because the way I sing just lends itself to that genre anyway."

It sounds like a snap. It was not, of course, yet Crystal's road to stardom has not been a particularly arduous one. It certainly wasn't fraught with the hardship and heartache common to traditional country singers. Loretta included. Born Brenda Gail Webb in Paintsville, Kentucky, she is the youngest of eight children—Loretta is the second oldest. Crystal is reticent about stating her age, but she's generally known to be twenty-seven. Her family moved to Wabash, Indiana, when she was four, and her singing career began there even before she left high school. A recording contract

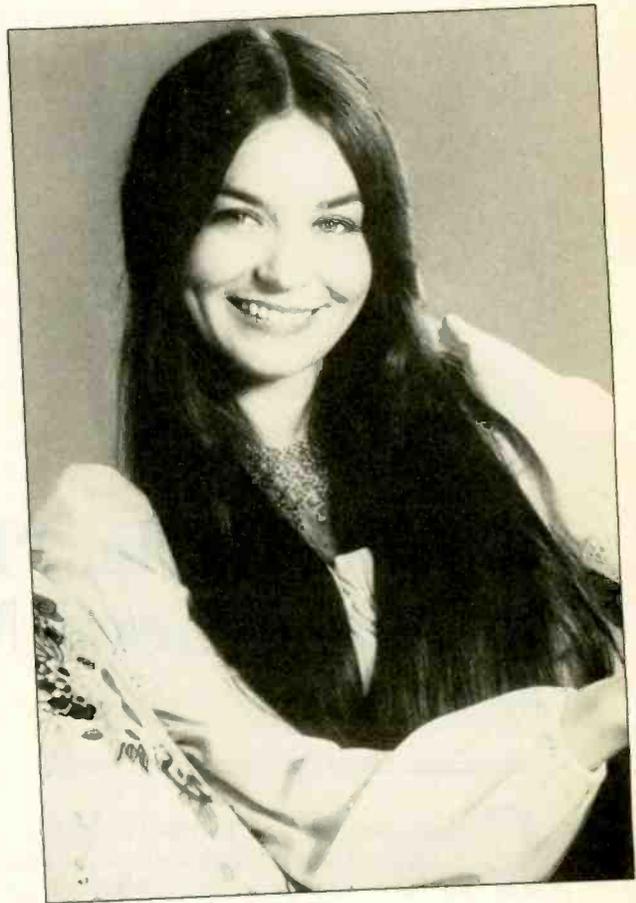
This voice could charm the truth out of Richard Nixon

with MCA's Decca, also Ms. Lynn's label, resulted in a few singles in the early '70s. One, prophetically titled *I've Cried the Blue Right Out of My Eyes*, was a minor hit in 1972.

Her move in 1973 to United Artists, for whom she has now made five albums, was especially significant in that she was paired for the first time with Allen Reynolds. An independent producer who has also worked with Don Williams, Reynolds was quick to recognize her potential: "When she and I met, it seemed that the people who recorded her before . . . hadn't gotten to the bottom of things.

"On the first album, we did a song that she and her husband Bill Gatzimos [currently a Vanderbilt law student] wrote, called *Beyond You*. From that time on, my view of Crystal Gayle was enlarged. I'd begun to get to know her, and this song showed me a lot. It certainly didn't tag her as a hick."

A hick was apparently what UA intended her to be, however. Despite the relatively varied material on that first record (some of the best of it written by Reynolds), a good dose of dobros, steel guitars, and fiddles gave the music a pronounced twang. "You have to understand where we were working from," says her producer. "She was signed to UA as a country act, and they answered their phone, 'UA Country.' I



Crystal's changing image as reflected in her albums' artwork: 1974's "Crystal Gayle" (top left); '76's "Somebody Loves You" (top right); '77's "We Must Believe in Magic" (middle); '78's "When I Dream."



couldn't get 'em to say 'UA Nashville.' ”

“The first two albums,” he continues, “had a budget of \$15,000 each, so you can see the handicap we were under. You have to be patient until the label wakes up to the potential. We built on it a little at a time.”

Their success in doing so was manifested in a

“I never tried to label myself ’til I got into the business and everybody else was labeling me.”

series of country hits. By the time her third album —“Somebody Loves You,” 1976—had run its course, she had fully made her mark in Nashville with its title cut, *I'll Get Over You* (written by Richard Leigh, who was also responsible for *Brown Eyes*), *Never Miss a Real Good Thing*, and several others.

Somebody Loves You, a Reynolds song, was an ideal vehicle for her. With a spare instrumental track dominated by lilting electric piano and guitar figures, there was little chance of the voice being washed under by the production. Then as now, Reynolds carefully avoided overkill. “I’ve always tried to get a good feeling around her, whatever will help her perform the song,” he says. “I don’t see any point in dumping things on, because I like a cleanness and a presence. I don’t like to use an excess of limiters and equalization, because I’d rather get that real honest presence, that warmth. I’m also careful about echo. Basically, if you have a good song and a good singer, you don’t have to rely as much on studio sounds. And if you keep the performance as simple as possible, I think it will last longer.”

Artie Mogull . . . indicates that there always was every intention that Crystal cross over.

Not surprisingly, the artist and producer regard the eventual broadening of Crystal’s appeal as the inevitable result of her talents. “We’ve always just chosen and recorded good songs,” she says. “I’ve always believed that you can get stale sounding the same—a lot of people do that. I like variety in my music.”

But Artie Mogull, United Artists president since 1976, indicates that there always was every intention that Crystal cross over, despite the label’s initial country pigeonholing. He contends that it was he who “decided that she could be, say, an Olivia Newton-John, that she could be the country crossover. She and I met out here and mapped it out within the first month of my arrival at UA.” There were just two elements that

gave Crystal her appeal, Mogull says matter-of-factly, and neither of them was the songs she sang. "They were 1) her voice, and 2) her looks."

He still considers Gayle's country tie the foundation of her career: "You try to get the single to No. 1 country, then No. 1 middle-of-the-road. Then it will cross over." And in part because she's young enough to have escaped becoming a Nashville landmark, Crystal sees no problem in maintaining contact with the country market. "I like to talk to people, not just from the stage but afterward, because it keeps me in touch with their reactions. They'll tell you if they like it or not. I think country people accept my music for what it is."

With her fourth album ("We Must Believe in Magic," 1977), the crossover that Mogull had envisioned happened in spades. It was accompanied by no radically new developments in the music; changes were actually rather slight. Her repertoire was widened by the dreamily textured title song, by Porter's *It's All Right with Me* (which got its country edge via some nimble banjo), and, of course, by *Brown Eyes*. With the increase in the recording budget allowed by the earlier hits, Reynolds was able to orchestrate each track according to its needs. As a result, fiddles sounded more like violins, dobros were replaced by harps, and the production became fuller without losing its characteristic restraint. It was an affirmation of Crystal's own notion that "with each album, I've grown."

One indication of that growth was purely visual. The covers of her first three UA albums, though they did justice to Crystal's beauty, depicted her as demure and slightly old-fashioned, very much a li'l ole country gal ("even though I didn't look at it that way," she says). But the fourth cover showed a woman decked out in a flowing print cape and surrounded by rose petals. She looked, as she describes it, "a little mysterious."

The woman in Crystal has reached full flower with her most recent record, "When I Dream." The photograph on the inside cover, if not exactly seductive, certainly reflects a more sophisticated, worldly Crystal. All of this comes from her increased involvement. "I picked all the pictures," she says. "I wanted to be on top of it all, and I wanted it just like you see it. With the albums before I was never able to say, 'This is what I want'—I never saw the pictures until they were printed. But this time I did."

The involvement also shows musically. "My first album, I was still inside myself," Crystal confesses. "Not saying anything, just doing what everyone else said. I feel this last one is more a part of me. I had more to do with it, by not just singing, but making suggestions too. If something didn't sound right, I'd say, 'Well, we'll do it over.'"

Reynolds concurs: "I've had more input from her along the way. For instance on the cut *Too Good to*

Throw Away [from "When I Dream"], had she not asserted herself early, it might have turned out to be a larger record with more instrumentation—but I think her input kept it in a nicer place. I have enough confidence in her talent to know that if it's feeling good to her, we must be getting close."

"When I Dream" has perhaps the strongest material of any Gayle album, from *Why Have You Left the*

"I think it's neat to have a sister as famous as Loretta Lynn!"

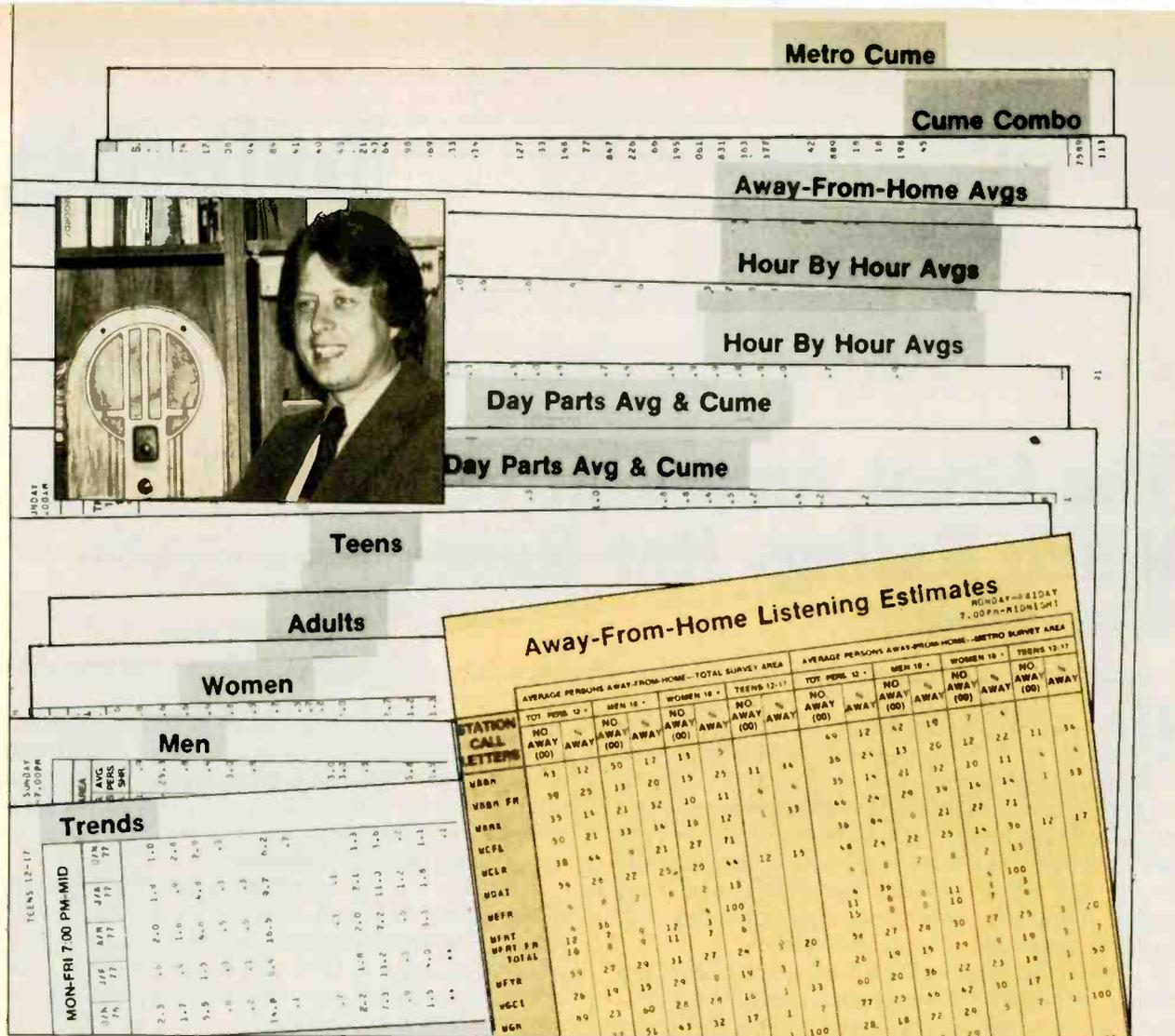
One You Left Me For with its lively a cappella opening through the moody single *Talking in Your Sleep* to the torchy reading of *Cry Me a River*. As before, the songs were chosen by Crystal and Reynolds. "Allen weeds through a lot of songs and plays the best ones for me, and then we sort of compromise," Crystal says.

With success has come confidence, but Crystal remains soft-spoken and not particularly articulate. ("A lot of times things sort of fall together," she says, in assessing her popularity.) And, by most accounts, she is still not a commanding performer. That distant, somewhat stiff stage presence contradicts the intimacy of her material. But if she's not the life of the party, that is by choice. "I like to be in the background," she says. "If I'm not there to sing, I'm there to listen, and I'd rather not be made a part of what else is going on. You know, I've never been one for many words, and I never will be."

Yes, but is she really as unresponsive as she has often been made out to be? "Well, answering questions about yourself, trying to get out the real meaning and then having people always take it backwards—I think that puts you a little on your guard. But I really don't think I've tried to keep my personal life away from the press. I'm just not going to give 'em a list of my daily activities."

She confronts the constant reports of rivalry between Loretta and herself with carefully measured words, as if in reaction to (or anticipation of) being misquoted. "People want to create a jealousy between us, but it's really stupid. Loretta has already done a career. To me, she's just in it now to be in it—she doesn't need to travel like she does, but she loves it. She's certainly not trying to be competitive with anyone, let alone her sister. And I think it's neat to have a sister as famous as Loretta Lynn!"

One finds no sensationalistic copy in Crystal Gayle, to be sure—none of Patti Smith's pseudo-poetic ramblings, Linda Ronstadt's Cub Scout coyness, or Bette Midler's outrageous brazenness. No *National Enquirer* material here, though *People* magazine did put her on its cover. Simply one of the loveliest voices and smoothest styles around. Here is one case where it is truly the music that does the talking. ●



Arbitron Audience Estimates Report for the Chicago Market; Ratings Game champion Ed Salamon

from certain minority groups, particularly black and Spanish-speaking, who considered ARB's inquiries an invasion of privacy. Even so, the ARB tag is still in common, though inaccurate, use in the trade.

Currently, Arbitron's research is conducted mainly through diaries distributed to an audience sample that is chosen at random but within predetermined age, sexual, and racial groups. Of the 168 total survey areas, the largest is New York and the smallest Bloomington, Illinois, which has a potential listener population of 141,900. (Children under twelve aren't counted.)

Names are selected by a company in Lincoln, Nebraska, largely through numbers listed in local telephone directories. An Arbitron representative calls each number, determines the demographic composition of the household, and has one diary sent to each eligible member from the company's production center in Maryland. Each resident records the times he listens and to what station for one week. There is no personal contact other than the initial phone call: the caller does not see the diaries, which are returned by mail.

For those people whose telephone numbers are

not listed, either at their request or because they move frequently, Arbitron uses what it calls an "expanded sample frame." Unlisted numbers are gathered by computer—for instance, if the numbers ending in the digits 34 and 36 are listed in the directory, it would be safe to assume that the ones ending in 35, though not listed, would also be in use. According to Ridgeway, the expanded sample frame is especially useful in tracking down eighteen-to twenty-four-year-olds, who tend to be the most mobile age group.

The decision to use diaries almost exclusively came in the wake of the All Radio Audience Measurement Study (ARMS) conducted by the Radio Advertising Bureau—a sales and information trade association—in 1966. It demonstrated that diaries provide the most consistent and accurate record of listening activity. Arbitron originally had used a combination of telephone techniques and diary distribution. Though the emphasis now is on the written word, an exception is in the black and Spanish-speaking markets, where listeners "don't respond to the standard diary technique too well," says Ridgeway. Blacks are telephoned and asked what they're listening to; researchers are sent into Spanish-speaking neighbor-

hoods for personal contact.

As with any service that determines the life or death of a business, Arbitron receives its share of knocks, particularly from the stations with low ratings. "The sample isn't big enough" is one frequent charge. And indeed, the number of diaries does seem small. In New York, with an eligible population of more than 16 million in the total survey area (including parts of Connecticut and New Jersey), something like 8,000 diaries are distributed per survey period. According to Ridgeway, ARB expects a return of perhaps 4,000. But Arbitron claims that the samples are scientifically selected and statistically sound.

Many stations figure otherwise. According to a story in *Radio & Records*, Hal Jackson (program director of black-oriented New York City station WBSL) charged Arbitron with "not practicing ethnic retrieval methods" outside the metropolitan area. He claimed that, if blacks on Long Island and surrounding regions were properly polled, the station's rating would increase "by at least one-third." Last July, at the time of the claim, WBSL's overall rating was second in the New York market, two-tenths of a point behind top-rated WABC.

Does two-tenths of a point make that much difference? Yes, especially in major markets where most radio time is bought by national sponsors through advertising agencies, who pay close attention to demographical data. "Ad agency time-buyers want to trust a survey's figures," says Storer's Salamon, "and Arbi-

Arbitron receives its share of knocks, particularly from the stations with low ratings.

tron is the service they trust." He says that in smaller markets, where most of the advertising is local, the decision to buy time "is more a matter of salesmanship by the station staff." But in major areas a good 90% of the billing is done through agencies. With hundreds of thousands of ad dollars at stake, it becomes clear why every member of the audience counts.

The nature of that audience counts as well. Prior to the ARMS report and Arbitron's re-entry into radio, ratings were simple, raw figures—how many sets of ears were listening to a given station at a given time. Nowadays, those figures are broken down according to sex, race, and age group. This explains why late-night talk shows are sponsored by savings and loan companies, retirement hotels, or land salesmen, and why you're more likely to hear about pimple cream on your locker rocker; why Cadillac advertises on "beautiful music" and middle-of-the-road stations, and Datsun and Toyota choose stations with younger and less affluent audiences. This also explains why Arbi-

tron's services are invaluable to advertisers.

For their part, station owners feel that their fees are much too high as compared to what agencies pay. Back in the Sixties, Arbitron charged agencies a relatively small fee and stations considerably more, depending on their size and market. Through the years, station fees have increased steadily while agencies still pay relatively little. Claude Hall, editor and publisher of *International Radio Report* and former radio editor of *Billboard*, says that two years ago KHJ, a highly rated Los Angeles Top-40 outlet, was paying \$17,000

Station owners feel that their fees are much too high as compared to what agencies pay.

for four semiannual reports. The sum has doubtless risen since then. This year, a top Reno station, KCBN/KRNQ (AM and FM outlets under the same ownership), paid \$4,600 for the results of a single survey. Yet Shirley Thompson, a former "placer" for Arbitron in Reno, told Hall that the company spent something in the neighborhood of \$800—including salary to placers (\$20 per week), but not including computer time or postage—for the Reno survey. And each station in that market wishing to use Arbitron information, either for sales purposes or to compare their standing to competitors', must pay a sum similar to KCBN's.

Another common charge leveled against Arbitron is "diary tampering"—two words that bring a chill to Ridgeway's voice. The diaries, remember, are sent through the mail, so many hands must touch them enroute to their destinations. There's plenty of opportunity to tamper with the intended flow, and divert a diary or two to a station that's interested in boosting its ratings. All one would have to do, after all, is fill in the magic call letters on every page. Is it worth the trouble? Yes, according to Hall. He estimates that the going black-market reward for an Arbitron diary in San Francisco is somewhere between a color television set and a trip to Hawaii. In Los Angeles, he says, it's a bit lower but still around \$300. Since the sample is relatively small, one or two diaries can make a vital difference—even if the rest of them are valid. And sudden jumps are common enough not to arouse much suspicion.

"Stations are licensed by the government," remarks Ridgeway, "and to be caught at such cheating would certainly jeopardize that license." He adds that, when Arbitron is made aware of tampering, it voids the diary and prosecutes to its "full ability."

Which may be a bit of a shallow promise, to the chagrin of already top-rated stations and honest managers. Recently a Memphis Post Office employee was

caught selling diaries that he had intercepted for a local station. Arbitron didn't prosecute at all ("We couldn't find a law that we could prosecute under," admits Ridgeway), but the Post Office did, and the employee was convicted of mail theft. There was a token firing at the station, and management is praying that the whole matter will blow over.

Hall cites a more substantial penalty for such carry-ons in the case of a Los Angeles station caught with an employee's dutiful—if immoral—filling out of five ARB diaries. Word got out, and advertising agencies boycotted the station to such an extent that an estimated \$3.5 million in billings were lost over a year and a half. Now *that* hurts.

Since so many stations have qualms about Arbitron, a few new companies have cropped up in the hopes of competing with the long-established giant. (Pulse's folding apparently did not discourage them.) Possibly the most significant service in Audits & Surveys' TRAC 7, founded under the auspices of the National Association of Broadcasters and the Radio Advertising Bureau. Since both are radio trade associations, it's safe to assume that TRAC 7's fees to stations will be more modest than those assessed by ARB. The service uses "constant outcalls" to listeners to ask what's on their dial. Whether the ad agencies will feel that this method—discredited by ARMS—is sufficiently accurate remains to be seen. (ABC Radio has already agreed to purchase the survey's results for five of their markets this fall.) Radio Index is another new service that uses outcalls, while Radio Acceptance Monitor (RAM), out of a San Diego suburb, uses diaries. So far all are small operations, but any signs of success should help keep Arbitron on its toes.

What's new in ratings? There have been a couple of developments in the past decade that help station programmers and ad salesmen do their jobs. In the early Seventies, Jim Yergin (currently a vice president of Westinghouse Broadcasting) discovered a way to measure listening patterns. He found that some people listen to some stations for a long time and some for a short time, depending on the type of programming. For example, a classic Top 40 station that plays *all* the hits—whether they be by Donny & Marie or Aerosmith—will keep a short playlist and repeat records frequently within a specific time period. The station might attract many listeners, but each for only a short time. When such a listener hears something he doesn't like, he turns the dial. At the other end of the scale, a classic "progressive" station that plays lots of album cuts, sticks to a certain type of sound, and doesn't repeat records with any discernible frequency might attract relatively small numbers, but each for a long time. Not surprisingly, few of such classic examples remain, as programmers shoot for something between the two formats.

Other, more subtle, discoveries have been made. Beautiful-music stations—WPAT in New Jersey,

WRCH in Hartford, WPCH in Atlanta, KUPL in Portland—may attract large audiences but people don't necessarily pay attention. (They may hear the program, but they don't listen to it.) So while the wall-paper outlet may lead the ratings for a certain age, sex,

It was determined that
Linda Ronstadt's *I Never Will
Marry* was much
more appealing to women
than to men.

race, and time period, it may be forced to charge less for commercial time than a station with a smaller audience.

Stations use ratings research to devise ways to boost their ratings. Already noted is the tendency to avoid "hard" formats in an effort to gain as wide an audience as possible. As Salamon puts it, "We try to find what people want to hear and then play it, rather than decide on a format and hope that people like it." A great many broadcasters use their request lines to get demographic information on their audience by asking the caller his age, sex, or whatever. Station employees also will telephone homes and ask what music the participant enjoys and would like to hear. "If I'm running a country station," says Salamon, "and we get lots of requests for Engelbert Humperdinck singing *After the Lovin'*, I'm not going to sit around all day trying to decide whether it's a country record suitable for my format—I'll play it."

Claude Hall has also developed new ways of looking at programming. *International Radio Report* publishes a weekly demographic appeal chart of the most-played "adult contemporary" records. Hall's researchers telephone at random, ask if the listener is familiar with a certain record, and to what degree he or she does—or doesn't—like it. The results are grouped demographically, with some surprising results. During a June '78 sample, for instance, it was determined that Linda Ronstadt's *I Never Will Marry* was much more appealing to women than to men; that Gerry Rafferty's *Baker Street* was liked very much by everybody between the ages of 18 and 44 who had heard it *except* for women 35 to 44 (those between 25 and 34 all loved it); that women between 35 and 44 hadn't heard—or actively disliked—England Dan and John Ford Coley's *You Can't Dance*, though the single was a favorite with most other groups surveyed.

Though Hall's sampling wasn't very strong—in the mid-hundreds—the concept could revolutionize programming. But if radio stations continue the trend to tight playlists, "tested" records, and playing only the hits, one wonders just where these new singles, new albums, and—especially—new artists will be heard. Which is another story altogether. ●

Records

KEN EMERSON
TODD EVERETT
TOBY GOLDSTEIN
DON HECKMAN
JIM MELANSON

JOHN STORM ROBERTS
SAM SUTHERLAND
NICK TOSCHES
KEN TUCKER
JOHN S. WILSON

The Who: Triumph and Tragedy

by Sam Sutherland

The Who: Who Are You. Glyn Johns & Jon Astley, producers. MCA 3050, \$7.98.
Tape: ● MCAC 3050, ● MCAT 3050, \$7.98

Few bands have scrutinized their own motives as often or as candidly as the Who, and fewer still have done so without collapsing into self-consciousness. Sometimes cloaked in parable, sometimes unflinchingly direct, Pete Townshend's songs have always been concerned with the primal question of artistic identity. If some have lapsed into awkward paradigms or didactic admonitions, on balance he and his band have animated their discourse with both ver-

bal and musical passion.

Townshend has always been the most perceptive critic of his own work, and throughout the '70s he has been on the lookout for any complacency in the wake of success. Lest anyone read the four-song meditation on rock on "Who Are You" as a defense in the face of New Wave, recall from "Quadrophenia" *The Punk and the Godfather*, in which a well-heeled rocker is challenged by a cynical young listener. The former observes:

I have to be careful not to preach
I can't pretend that I can teach
And yet I've lived your future out
By pounding stages like a clown . . .

That was five years ago. Two years later, the Who further prophesied rock's des-

tiny with a new vitality in their style. "The Who by Numbers" stripped away their previous latticework of synthesizers, production effects, sudden shifts in meter, and vivid orchestrations, and returned to lean guitar rock with straightforward rhythms. Now, at the tail end of last summer's crop of strong rock & roll albums, they've passed that impulse to reduce, despite its sudden logic for some of their peers. Instead, they've moved ahead, and the chronic internal dialogue testing the grandeur and folly of their progress is rendered more clearly than ever.

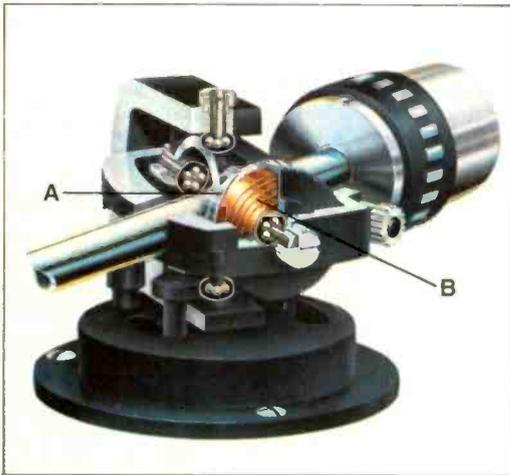
"Who Are You" isn't a conceptual work—among other things, it signals John Entwistle's most visible role as the band's other source of material—but Townshend has contributed four songs addressing both his own work and rock in general that are inescapably linked. *New Song* is the first of these, its music and lyric ironic refutations of one another: Rhythmically, the song tumbles through the meter changes characteristic of "Quadrophenia," with Townshend introducing new guitar and synthesizer wrinkles to the mix. Instead of the synthesizer continuos of the past, he focuses more on single lines shaped by his guitar; that shift, and the rhythmic accents he achieves, are fresh modifications. But the lyric, sung by Roger Daltrey, questions whether this surging music isn't really "the same old song with a few new lines."

On *Sister Disco* and *Music Must Change*, Townshend turns his attention to rock itself. The former is a dazzling if transparent attack on dance-floor robot-



Moon, Townshend, Daltrey, Entwistle: self-examination yields success

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From pivot to tonearm head, the shape is a straight line, the shortest distance between those two important points. (Curved tonearms may look sexier, but at the cost of extra mass, less rigidity and lateral imbalance—none of which is consistent with good engineering practice.)

Tracking force is applied by a flat-wound spring coiled around the vertical pivot (B), and this force is maintained equally on each groove wall whether or not the turntable is level. The tonearm's perfect balance is maintained throughout play.

By contrast, tonearms which apply tracking force by shifting the counterweight forward are actually unbalanced during play and prone to mistracking. For example, on warped records the stylus tends to dig in on the uphill side of the warp and to lose contact on the way down.

Vertical-bearing friction in the CS1237 tonearm is astonishingly low—less than 8 milligrams. It can track as low as 0.25 gram—which means it will allow *any* cartridge to operate at its own optimum tracking force.

There's still more. The counterweight is carefully damped to attenuate tonearm resonances. Anti-skating is separately calibrated for all stylus types. Cueing is damped in both directions to prevent bounce. And because the CS1237 can play up to six records in sequence, the stylus angle can be set for optimum vertical tracking in either single-play or multiple-play.

To find any other tonearm that seriously matches the CS1237's, you have two choices.

You can consider one of the more exotic separates. But you'll find they cost as much as the entire CS1237. (Price: less than \$180, complete with base and cover.)

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CIRCLE 17 ON PAGE 141

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ics, amplifying the milieu of the title into a new Townshend vision of lost transcendence. The latter literally walks the line between manifesto and self-analysis and is the album's most awkward moment. Yet the richness of the playing and the bold return to more elaborate orchestration sustain power where lyrics threaten to stumble. Finally, on *Guitar and Pen*, the band rebounds with a rock & roll fight song exhorting a young player to keep trying because he really has no choice. In an age of hip cynicism, the dangers of expressing such concerns should be obvious. But framed by Townshend's varied styles on guitars, keyboards, and synthesizer—which are lent a new lissomeness from their occasional jazz accents—and powered by Entwistle's now telepathic link to drummer Keith Moon, those comments become driving, persuasive testaments.

Counterbalancing Townshend's absorbed treatise on rock are two striking Entwistle songs. *Had Enough* (more internal history, since "Quadrophenia" offered virtually the same title for a Townshend song) and *905*. The first is a burned love song that flashes with the writer's overdubbed horn parts and Ted Astley's urgent string counter-melody. And *905* revisits the by now familiar motif of the birth factory with a wonderfully cinematic glimpse into the mind of a test-tube human ("Every sentence in my head/Someone else has said..."). Townshend's title song concludes the performance in a turbulent tour de force that transforms its three-word chorus into question, answer, and attack.

Any complaints with "Who Are You" are minor and largely subjective: *Love Is Coming Down* smacks too much of conventional romantic imagery, and Daltrey's overall dominance on vocals is a bit disappointing. Otherwise, I'd have to call the LP a ringing triumph. Keith Moon's death has cast a tragic pall over its impact, yet rather than recast the LP's success as an epitaph for what had been, it is perhaps more appropriate to recall Townshend's early '70s lyric:

Rock is dead
Long live rock.

The Beach Boys: Winds of Change. Alan Jardine & Ron Albach, producers. *Brother/Reprise MSK 2268*, \$7.98. *Tape: M5 2268, M8 2268*, \$7.98.

"Winds of Change" plays with willful simplemindedness as obsessively as last year's "The Beach Boys Love You" but lacks that album's structural rigor and wit. Filler is obvious, too. The covers of *Peggy Sue* and *Come Go with Me* are okay but only the former achieves distinction through a neat Beach Boysian

stylistic switch—the melody is slowed down to the point where Buddy Holly's ebullience becomes Brian Wilson's melancholy. Among the originals is *Sweet Sunday Kinda Love*, whose clumsy music stumbles along with an equally club-footed lyric. And while *Belles of Paris* contains a good chuckle in Mike Love's croon to "craw-sawnts" (you know—them flaky pastries) the pretension quotient is dangerously high. Credit this to coproducer Ron Albach, who cowrote *Belles* and *Winds of Change*, the Boys' most ponderous bit of superfluousness since *Surf's Up*.

All that said, "Winds of Change" is not without some real pleasure, most incisively *Pitter Patter*, in which the drip-pily charming lyric contrasts thrillingly with some tough rock & roll. *My Diane* is a thoroughly respectable entry in the Boys' canon of female odes, and damned if *She's Got Rhythm* isn't the best disco song I've heard this side of KC and the Sunshine Band. And who can complain about the sappy tune of *Match Point of Our Love* when the title metaphor is carried out with such clever offhandedness?

Brian cowrote eight songs here, and he sings with a newly soothed throat and renewed expressiveness. Despite the flaws of "Winds of Change," our Boys can by no means be counted out. K.T.

Joe Cocker: Luxury You Can Afford. Allen Toussaint, producer. *Asylum 6E 145*, \$7.98. *Tape: TC5 145, ET8 145*, \$7.98.

By the mid-'70s, Joe Cocker's earlier vitality—not just his reverent impersonation of Ray Charles at his most abandoned, but his excellent material and lively playing—had deteriorated into a broken, literally crying style that communicated pathos more than passion. Unlike some listeners who took the transparency of his decline as an instance of real-life art, I could never listen to ballads like *You Are So Beautiful* without wincing. The sound of his strangled, hopeless devotion was too literal a mirror of his own life.

That makes the achievements of his first album in several years all the more welcome. If "Luxury You Can Afford" never entirely shakes off the shadow of his private tragedies, producer Allen Toussaint has spurred Cocker to his most controlled and energetic work in years. There are a few awkward moments: On the opening song the singer exhorts us to acknowledge that it's *Fun Time*, but his bruised howl sounds like he's having anything but fun. Still, Toussaint's emphasis on Cocker's original strong suit of driving blue-eyed r&b succeeds overall in drawing the singer away from his



Cocker—back in control

more melancholy ballad styles. The producer applies bubbling horn charts and a typically nimble, syncopated rhythm section to both contemporary r&b standards and rock material, and when singer and players mesh the results are ebullient. Cocker tackles Dylan's *Watching the River Flow* with a breezily rocking stride, and justifies yet another version of Barbara George's *I Know*.

Some other choices prove dubious, especially the flubbed if valiant attempt to cover *I Heard It Though the Grapevine*, hampered by a new rhythm arrangement, and *A Whiter Shade of Pale*, marred by a pedestrian fuzz guitar solo. Yet, on balance, Cocker sounds heartier than he ever has since the early '70s, suggesting the new partnership with Toussaint is worth further exploration. S.S.

The Emotions: Sunbeam. Maurice White, producer. *Columbia JC 35385*, \$7.98. *Tape: JCT 35385, JCA 35385*, \$7.98.

Amid the drabness of too much contemporary middle-class soul and the exaggerations of a decaying gospel/soul vocal tradition, the Emotions stand out with particular clarity. They have transformed the slightly silly excitement of the '60s "girl groups" into marvelous curlicued melodies and kept it all notably clean. It's a sound that's beguiling without ever sounding soft at the center, contrasting sweet with punchy to delicious effect.

"Sunbeam" sparkles with good tracks. In *Walking the Line*, the Emotions' airiness lends a distinctive quality to a number that might otherwise have sounded insipid. *Ain't No Doubt About It* is a mid-tempo dancer that's executed beautifully—its easy, swinging backing gives perfect support to swirling vocals whose complexity adds up to simple exhilaration. In fact midtempo dancing swing is the basic mood of the album, carrying on

through the tight, unfussy *Smile* and through *I Wouldn't Lie* and *My Everything*. And *Love Vibes*, heavy on the backbeat, has a strong conga-based Latin edge in which vocal and instrumental are almost evenly balanced.

Only toward the end of the second side is there a marked change with the rich flugelhorn entry of *Spirit of Summer*. It's a jazz-inflected ballad with a shimmering wordless group vocal edged by sax and flugelhorn and scatting (some of it apparently synthesized) interwoven with horns. It makes a brief, extraordinarily effective mood-changer before *Whole Lot of Shakin'*—a high-rider that's clear and clean and upbeat in every sense, propelled by a simple drum pattern and a subtle rhythm guitar.

That so many black albums are ruined by overblown production makes Mau-



The Emotions

rice White's altogether admirable midwifery doubly welcome. Taut, precise backings keep the vocalists firmly in the center; subtle melodic, dynamic, and tempo contrasts ensure a freshness without ever moving outside the bounds of current big-time popular sounds. To be able to work within a format that allows few surprises and at the same time maintain freshness is the acme of the commercial producer's craft. And White is one of the best.

J.S.R.

Hall and Oates. *Along the Red Ledge*.

David Foster, producer. RCA AFL 1-2804, \$7.98. Tape: AFK 1-2804, AFS 1-2804, \$7.98.

"Along the Red Ledge," easily Hall and Oates's best album, has a tough sheen to its music. As produced by David Foster, there is an inveigling cavernousness to its sound, as if it had been recorded in some bleak alleyway in the middle of the night. Its surly, charming r&b, replete with glistening guitars and punchy horns, shaves Hall and Oates's usually grandiose melodrama down to a few terse declamations of passion and regret.

Or at least when the music is written by Hall. "Red Ledge" is really Daryl's triumph, his fast soul melodies taking note of prime Motown, his vocals a cool

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CIRCLE 6 ON PAGE 141



Hall & Oates—trimming down the grandiose melodrama

blaze of sharp sentiment. He falters—*August Day* is ridiculously purple and *Have I Been Away Too Long* a tiny idea stretched out too long—but his fast numbers lift the album into the best white r&b in recent memory.

John Oates continues to construct jangling, thick melodies in a hopelessly fevered poetic style. His *Serious Music* has at least the virtue of knowing what its worst flaw is (see title), but *Pleasure Beach*, with its easy irony and heaped-on studio effects, is the stuff of faking it.

The high points are Hall's *The Last Time*, on which George Harrison takes his career in hand and plays his best, most stirring and snappy lead guitar in years, and *It's a Laugh*. *Laugh's* central conceit—that some romantic situations are so complex that they become merely absurd—is a welcome cure to the smarmy vindictiveness of many other Hall and Oates opuses. "Along the Red Ledge" certainly makes one look forward to Hall's Robert Fripp-produced solo album—he seems to be on a streak. K.T.

Steve Harley: Hobo with a Grin. Steve Harley, producer. *Capitol SW 11770*, \$7.98. *Tape: 4XW 11770, 8XW 11770*, \$7.98.

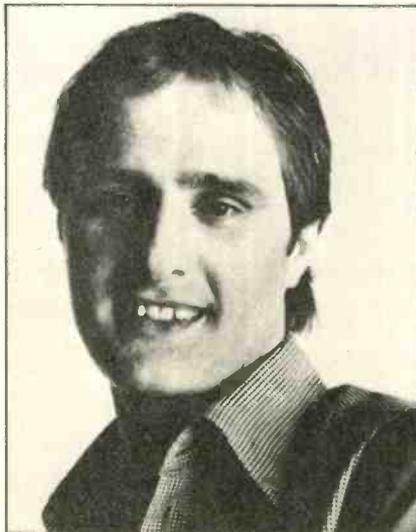
Steve Harley's communication breakdown can be summed up in an ancient professorial proverb: Those who can do; those who can't teach (or, in this case, preach). There's no doubt that Harley is a keen observer, but he runs smack into the double trap of insincerity and ineffectualness when he uses his music to chastise and, at the same, to gain commercial acceptance.

When he led a British band called Cockney Rebel about four years ago, Harley's music was vicious, its messages wrapped in thunderous, angry vocal bolts. Since then, he has let the group go,

replaced it with anonymous session players, and relocated to Los Angeles. His genuine vituperation has turned into fashionable posing, undercut by a palpable fear of new heroes. Harley is today neither English nor American. Worse, he comprehends the cultures of neither one deeply enough to be effective.

His way of getting in touch with America is that cure-all for fun lovers, disco. Right from the start of "Hobo with a Grin," on *Roll the Dice*, he settles for good times. Even a track with the political (albeit dated) title of *Amerika the Brave* gets a prominent beat, which only serves to undermine his commentary. If covering a Motown masterpiece like *I Wish It Would Rain* is Harley's vehicle to emphathize with U.S. black music, it fails as badly as Mick Jagger's disasters with the Temptations' material.

Hot Youth, a relevant-sounding panorama of explosive young people, momentarily puts him back on target. But the song that follows defeats any tenuous



Harley—those who can't . . .

credibility. Contained in the slyly punctuated (*I Don't Believe*) *God Is an Anarchist* are the words, "new rock is hard as butter/hip now to say you come from the gutter. . . ." Perhaps it was in disgust over the punks' pointed, screechy pronouncements that Harley left Britain and became crotchety and bitter. But his aggressive voice and undeniable journalistic talent would be put to better use if he could see that New Wave's finger-pointing came partly from his very own Cockney Rebel albums. T.G.

Heldon IV: Heldon Is a Musical Experience. *Aural Explorer AE 5001*, \$7.98. (*Aural Explorer*, 43 West 61st St., New York, N.Y. 10023).

Synergy: Cords. Larry Fast, producer. *Passport Records PB 6000*, \$8.98. *Tape: 5 167-6000, 8 167-6000*, \$8.98.

Electronic music—pop division—has been urged on lately by the success of such unlikely talents as Rick Wakeman, Tangerine Dream, Kraftwerk, Michael Hoening, etc. It's hard to understand who is going to buy all this product. Wakeman at least has strong rock connections, so much of his music is couched within many listeners' frames of reference. Most of the newer product reaches deeper into the technical aspects of synthesizers—programmers, sequencers, computerized controlling devices, etc.—and what emerges is listenable only. I suspect, with the aid of chemicals.

Heldon's music, devised almost completely by "chief electronics wizard" Richard Pinhas, overbearingly uses sequenced melodic-rhythmic passages as the underpinnings of his mercifully short pieces. Drifting off in the background one can usually hear a heavily fed-back Les Paul guitar line. The effect is, at best, annoying, and at worst provocative enough to be subject to the "off" switch on one's amplifier.

Synergy is actually a trade name for Larry Fast, who is also identified as "the wizard of electronic music" (which makes me wonder whether dancing atop the gain control classifies one as a wizard). Fast has made two previous albums that use multiple tracking of synthesizers and has recorded fairly extensively with performers ranging from Barbra Streisand to Nektar. "Cords" is a carefully organized album that includes ten tracks, one in two parts, connected by three variations of a piece called *On Presuming to Be Modern*. The other titles suggest large-view concepts ranging from mythical beasts to the satellites of Mars.

That Fast is a masterful manipulator (and apparently creator) of synthesizers is unquestionable—parts of this album might be easily mistaken for a full blown

symphony orchestra. Unlike Pinhas, he does not seem fascinated by sheer mechanics, preferring to use synthesizers to create an enormous array of musical textures. My problem with Fast is, very simply, his compositional abilities. Shorn of electronic "wizardry," "Cords" consists of nothing more than some mildly pleasant, nineteenth century-flavored orchestral pieces. Performed by an orchestra, they might find their proper place in a summer Pops concert. What Fast needs is a composer who can conceptualize sound, melody, and harmony as brilliantly as he can mold electricity to his demands. D.H.

KC and the Sunshine Band: Who Do Ya (Love). Harry Wayne Casey & Rick Finch, producers. TK 607, \$7.98. Tape: ** 5TK 607, 8TK 607, \$7.98.

If ever a group made it on a simple formula, it's KC and the Sunshine Band. On the surface their sound has seemed rather simplistic, though the means to achieve that sound are a different question. But on three tracks of "Who Do Ya (Love)," Harry Wayne Casey and Rick Finch have made a conscious (though cautious) attempt to move beyond their usual Latin-and-Caribbean-flecked r&b format.

The light, brisk drive of *It's the Same Old Song*, works as well for Holland-Dozier-Holland's material as it has for KC's own. The semi-reggae *How About a Little Love* may just be the best cut on the album: a soft and mellow vocal set off admirably by crisp guitar and percussion, with a good deal of grace woven into its simplicity. The third, *Come to My Island*, moves nearer to KC's traditional Bahamian tinge. It is a lot like those 1950s pseudo calypso numbers whose kitsch was so ingratiating it was almost impossible to hate them. It suits KC just fine.



Harry Wayne Casey

The rest of the album is vintage space dust, with a couple of standouts. *Do You Feel All Right* has the elements that are the basis of the band's success: light-riding rhythm, repetitive lyrics and riffs, and general ability to tap into the subconscious. *Sho-Nuff* is another near-classic, setting exceedingly simple passages for voices and trumpets ("Sho-nuff" squawk, "sho-nuff" squawk) against sections more melodic but almost equally laconic.

At their own level of undemanding but continuously interesting pop/r&b, KC has few rivals. The question is, can they maintain that level, or will freshness degenerate to craft and then routine? "Who Do Ya (Love)" doesn't move far enough away from home base to provide much of a clue. J.S.R.



Koloc—a voice to contend with

Bonnie Koloc: Wild and Recluse. Joel Dorn, producer. Epic JE 35254, \$7.98. Tape: ** JET 35254, JEA 35254, \$7.98.

Even though she's had a genuine hit single, 1974's *You're Gonna Love Yourself in the Morning*, success has eluded Chicago-based Bonnie Koloc. While her folkie-pop style has never fallen out of vogue, there's something about her records that keeps them from getting heard. It's a pity, for they are extremely listenable, well thought-out, tasteful, and attractive affairs. The current sample, produced by Joel Dorn, is something of a departure. Dorn is well known for his attention to detail and "spare no expense" attitude, so this is probably Koloc's most produced album ever. Yet it is neither overarranged nor otherwise apparently extravagant—taste again prevails; taste is as synonymous with Dorn's name as it is with Koloc's.

Both singer and producer love to flaunt their wide interests, and "Wild and Recluse" is typically eclectic. Included here are versions—good ones—of the Beatles' *Golden Slumbers*, Gene Autry's *Back in the Saddle Again*, Carole King's *Up on the Roof*, and the seldom recorded *Indiana* (Back Home Again in

Indiana). About the only other artist I can think of who would select such a grab bag of good songs is another female folkie, Mary McCaslin.

Knowing Dorn's previous work, I'd guess that there were a number of New York session musicians involved, with a couple of old-time jazzmen added for spice. Epic, unfortunately, has neglected to name them, except for the white Roomful of Blues band, arrangers William Fischer and Rob Mounsey, and Harold Vick—a studio musician who merits credit as a result of his contract with another label. Whoever is involved, the album sounds fine and should do much to enlarge Koloc's regrettably small circle of fans. T.E.

Ohio Players: Jass-Ay-Lay-Dee. Ohio Players, producers. Mercury SRM 1-3730, \$7.98. Tape: ** MCR 41-3730, MC 81-3730, \$7.98.

Ohio Players is one of a legion of go-for-the-gut black bands that have made the funk sound a substyle in its own right. War and Mandrill are perhaps the best of that ilk, and as such they are all about dance and party; but they are also about drive, flair, and good humor.

The foundation of these groups is the old James Brown sound and ethos. They have now gone beyond their source, with liberal importations from blues, Latin music, and jazz, and they frequently have an adventurous attitude toward arranging. They have also, especially recently, polished off the raw edges of early funk and, in so doing, have suffered from a lack of tension. That is the problem with this album. It is particularly noticeable here because midtempo is the Ohio Players' favorite pace; the group is at its best in numbers that combine an impelling dance rhythm with ballad or semiballad singing. The best track on "Jass-Ay-Lay-Dee" is *Time Slips Away/ Shoot Yer Shot*, which starts as fairly gentle, laidback piece and builds almost imperceptibly to a brisk transition to the faster *Shoot Yer Shot*. It's all handled with an ease and timing that can't be faulted.

The rest of the LP, though often elegant, is more often predictable or tame. *Funk-O-Nots* falls into the far too well-worn groove of an almost talismanic invocation of the spirit of Funk. Unfortunately, the spirit it mostly invokes is déjà vu. The easy-loper *Sleepwalkin'* falls off the other end of the seesaw. It's one of those put-on sexy numbers, replete with occasional cries as of rather perfunctory orgasms; though full of nice little arranging touches and excellent male two-voice passages, it's a little too relaxed.

Continued on page 169

Gospel in the Seventies: Some Collections and Reissues

by John Storm Roberts

The links between gospel and popular music are far wider and more complex than the usual soul-black church genealogy. Gospel was the first form of expression for perhaps 90 per cent of all black American singers and for a very large portion of black musicians of whatever sort. And though older church people may not have liked to admit it, the links have always been two-way. Gospel's vocal and instrumental styles have both influenced and been influenced by what goes on in the secular world. Currently it's taking in '70s rhythm & blues and soul elements, not only by adopting funk rhythms, horn charts, and sometimes string arrangements, but also by borrowing melodies, backups, and even lead vocal styles.

The release of ten early '70s albums from the Gospel Truth label (formerly owned by Stax, which is now owned by Fantasy), is a good opportunity to assess some of gospel's recent currents. The set includes one LP each by the "progressive" Howard Lemon Singers of Detroit and the Los Angeles-based Henry Jackson Company, three by the Rance Allen Group (which also operates on the West Coast), and no fewer than five by the big choir of the Reverend Maceo Woods, a pastor on Chicago's South Side.

As you'd expect, these groups make use of the gospel tradition and the secular strain in various ways. Howard Lemon's "progressive" gospel is culled from the blandest regions of middle-class soul and is significant neither as gospel nor as popular music. Though the Henry Jackson Group has several fine lead singers and at times makes use of the polished choir (an increasingly important gospel substyle, and the one with the least influence on contemporary r&b), it too tends to founder in the trappings of modern studio arrangements. But while the Lemon and Jackson releases show what can go wrong when the contemporary is pursued without taste, Allen and Woods provide examples of crossover at its best.

Allen's first two albums—"The Rance Allen Group" and "Truth Is Where It's At"—both use three musicians, including Allen on keyboards and lead vocals. For the third, "Brothers," he brought in several extra backup singers and used strings on certain cuts. On the whole the

first two are more successful. They make use of contemporary secular rhythms and bass and drum lines but do not lose any of the gospel feeling. *Up Above My Head*, from his first LP, is contemporary gospel at its best, with a sure sense of dynamics and drama. Allen's brilliant singing is somewhat similar to that of the Mighty Clouds of Joy's Johnny Martin, yet it is totally his own.

Woods's Christian Tabernacle Choir is a fairly large ensemble, some thirty-five voices strong. Like most gospel choirs, its characteristic arrangements set one or more lead voices against a very wide range of tonal, harmonic, and rhythmic choral effects. Frequently these choirs will move from early fast-tempo jubilee to complex chord changes and semiconservatory trappings within one number. But though you might expect them to be tempted by grandiosity, that happens rather rarely.

The Christian Tabernacle Choir is magnificent. At first I couldn't understand why half of the entire Gospel Truth reissue should be devoted to it, but the first hearing set me straight. Over the

period covered by these releases, 1969-74, the group moves from a fairly traditional repertoire to the Latin-inflected '70s r&b rhythm and B. B. King-like guitar of *Goodbye Loneliness* ("Goodbye Loneliness, Hello Happiness"). Despite that rather wide musical migration, the group never loses any of its power or classicism, nor does it abandon the surge-spirituals and uptempo jubilees central to gospel.

The main reason for the Choir's strength is that it never forgets gospel music's central purpose: worship. And that is the ambiguity in much contemporary gospel. Older gospel singers used secular music (some of them had been blues or jazz musicians before conversion), but they did not hanker after secular careers. Much—perhaps most—of the young generation sees its art as a bridge to a new Promised Land: what many of them still call rock & roll. They may be committed Christians, but their eyes are on the charts, and many of them cross over stylistically before they cross over in material. Too bad, for too close an association with the secular Land of Plenty can reduce the music's red meat to soy-burger.

This is not the usual critic's wail that change is messing up a much-loved style. In fact the current instability of gospel music may well lead to a renaissance. That these groups can adopt many popular influences without losing their core is exemplified on a recent ABC/Peacock retrospective double album by the mag-



The Rance Allen (center) Group—contemporary gospel at its best



The Howard Lemon Singers—an unbalanced mix

nificent Mighty Clouds of Joy. The Clouds successfully took in everything from rock guitar to congas (and were accused of iconoclasm), moving from strength to strength before they finally went secular. "Perpetual Moments" also on Peacock, shows just what groups like the Howard Lemon Singers are abandoning. As an anthology of various major groups and soloists of the 1960s (including Inez Andrews, the Five Blind Boys, and the Sensational Nightingales) it provides some historical perspective on recent gospel history. ●

The Rance Allen Group. Dave Clark & Toby Jackson, producers. *Gospel Truth GT 14001*, \$6.98. *Tape: ●● 5 14001, ●● 8 14001*, \$6.98.

Rev. Maceo Woods & the Christian Tabernacle Choir: In Concert. Rev. Maceo Woods, producer. *Gospel Truth GT 14002*, \$6.98. *Tape: ●● 5 14002, ●● 8 14002*, \$6.98.

Rev. Maceo Woods & the Christian Tabernacle Choir: Jesus People. Rev. Maceo Woods, producer. *Gospel Truth GT 14003*, \$6.98. *Tape: ●● 5 14003, ●● 8 14003*, \$6.98.

Rev. Maceo Woods & the Christian Tabernacle Choir: God Save Your People. Rev. Maceo Woods & Dave Clark, producers. *Gospel Truth GT 14004*, \$6.98. *Tape: ●● 5 14004, ●● 8 14004*, \$6.98.

The Rance Allen Group: Truth Is Where It's At. Dave Clark & Toby Jackson, producers. *Gospel Truth GT 14005*, \$6.98. *Tape: ●● 5 14005, ●● 8 14005*, \$6.98.

The Henry Jackson Company. Gene Barge, producer. *Gospel Truth GT 14006*, \$6.98. *Tape: ●● 5 14006, ●● 8 14006*, \$6.98.

Rev. Maceo Woods & the Christian Tabernacle Choir: A New Dawning. Rev. Maceo Woods, producer. *Gospel Truth GT 14007*, \$6.98. *Tape: ●● 5 14007, ●● 8 14007*, \$6.98.

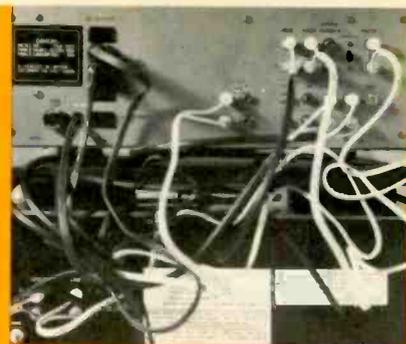
The Rance Allen Group: Brothers. Dave Clark & Toby Jackson, producers. *Gospel Truth GT 14008*, \$6.98. *Tape: ●● 5 14008, ●● 8 14008*, \$6.98.

Rev. Maceo Woods & the Christian Tabernacle Choir: Goodbye Loneliness, Hello Happiness. Rev. Maceo Woods, producer. *Gospel Truth GT 14009*, \$6.98. *Tape: ●● 5 14009, ●● 8 14009*, \$6.98.

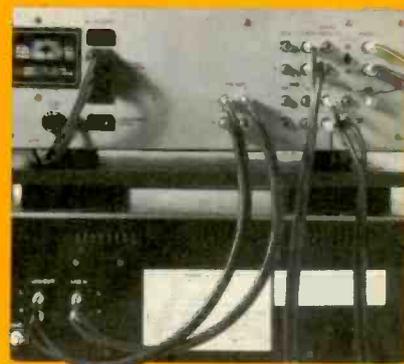
The Howard Lemon Singers: I Am Determined. Lester Snell & Tom Nixon, producers. *Gospel Truth GT 14010*, \$6.98. *Tape: ●● 5 14010, ●● 8 14010*, \$6.98.

The Very Best of the Mighty Clouds of Joy. Compiled by Sonny Carter. *ABC Peacock AA 1091/2*, \$7.98. *Tape: ●● 5 1091/2AA, ●● 8 1091/2AA*, \$7.98.

Various Gospel Artists: Perpetual Moments. Compiled by Sonny Carter. *ABC Peacock PY 59235*, \$6.98. *Tape: ●● 5 59235PY, ●● 8 59235PY*, \$6.98.



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Break
Away

Moon Martin's Debut: Genius Wimp Makes Good

by Ken Tucker

Moon Martin: Shots from a Cold Nightmare. Craig Leon, producer. *Capitol SW 11787, \$7.98. Tape: 4XW 11787, 8XW 11787, \$7.98.*

Moon Martin's best-known song is probably *Cadillac Moon*, the title cut of a Mink De Ville album. But the many non-Martin versions of Martin's material do not even come close to what takes place on "Shots from a Cold Nightmare," his solo debut. Willy De Ville just incorporated *Cadillac* into his post-soul bag, played down the Chuck Berry-ish mood and optimism, and lost a lot in the process. Michelle Phillips at least made *Victim of Romance*, the title of her latest album, her own by introducing a surprise twist: You figured she *had* to be the victim, but in her brassy defiance she became the victor. Finally, the three Martin songs on Lisa Burns's debut album are buried (along with Lisa) in producer Craig Leon's overwhelmingly overdone Wall of Sound.

About the only things that emerged from those renditions were the hooks. Martin writes clean, simple tunes, puts the catchy riff in the chorus most of the

time, and peels down his lyric to a single memorable phrase. That's why Phillips yelling the word "victim" over and over is—far from oppressive—brilliantly thrilling. On "Shots from a Cold Nightmare" Martin has recorded ten hooked wonders, and all but one are nasty-minded, witty pleasures. *You Don't Care About Me* is the only melancholy moment, and even it is rousing in its sadness.

The album commences with *Hot Nite in Dallas*, leading one to think that Martin is up to Warren Zevon's tricks of curt, hard-boiled imagery and tough guitar lines. Martin does have Zevon's way with the non sequitur image, as he blithely notes in the middle of his melodrama that his father "dressed in drag." But with Zevon, that sort of thing is meant to disturb. (Sometimes it does, more often it doesn't.) With Martin, it is probably just a convenient way to rhyme the end of the verse. This is a large part of his charm, and if you don't appreciate sloth in the service of irony, my man may put you off. I think he makes studied laziness pay off in sheer brazenness and invention: When he distills a short story

into the chorus of *Paid Killer* ("A paid killer/Only twenty-five killin' me alive") and sings it over a run-for-your-life guitar riff, he gets its message across.

Throughout, Martin sings like the genius-wimp he resembles on the cover, snottiness and sensitivity personified, with Warholian hornrims. His high, nasal moan is frequently double-tracked to enhance his—but not our—discomfort, and to add a bit of distance to his tales of nocturnal mischief. You can't imagine that this pampered white boy could last an hour out on the street, but damned if it isn't exhilarating to hear him try to



Martin—sloth in the service of irony

convince us and himself that he could.

Martin enjoys his persona, certainly, but he's no solipist; if anything, he allows his women friends to define his moods. On *She's a Pretender* when he breathes, "You done me wrong/Out of her boot she pulled a knife/Get back I'm gonna take your life" it's not at all clear who is talking, whose life is threatened. Martin's confusion is willful and funny, transcending the hokeyness of the situation.

The sound throughout "Shots" is tough pop/rock, the kind Walter Egan and Dwight Twilley purvey but with more attention to punchy verses, sharp hooks, and a pervasive sense of humor. With this last, Martin puts himself in that Buddy Holly-early Beatles tradition that Egan and Twilley so obviously aspire to and rarely attain. The hard-edged rock & roll that fills "Shots from a Cold Nightmare" hasn't had this sort of self-assured intelligence in quite a while: Moon Martin has made a beaut of an album. ■

Pop/Rock

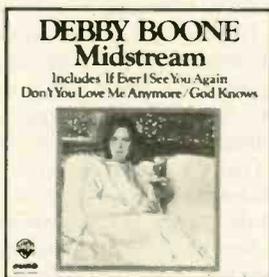
BY TODD EVERETT

Aerial: In the Middle of the Night. Aerial, George Semkiw, & Paul Gross, producers. *Capitol SW 11828, \$7.98. Tape: 4XW 11828, 8XW 11828, \$7.98.*

Capitol has one Canadian band of Beatles imitators in Klaatu; now they have two. Aerial began life several years ago as Liverpool, a sort of early *Beatlemania* road company. Today they're writing their own songs, some of which are okay, and their range of influences has grown to include, among others, the Who. I shouldn't be too hard on them: They're just a bunch of guys trying to make a living.

Debby Boone: Midstream. Brooks Arthur & Joe Brooks, producers. *Warner Bros. BSK 3130, \$7.98. Tape: M5 3130, M8 3130, \$7.98.*

Side 1, produced by Brooks Arthur, consists of five non-standards and one semihit (*Oh No, Not My Baby*) composed by such stalwarts of Sixties mainstream pop writing as Caroles King and Sager, Neil Sedaka, and Peter Noone. Side 2 includes six songs written and produced by Joe (*You Light Up My Life*) Brooks. Debby Boone is a more appealing singer than a lot of her press would indicate, but the album's still a bore.



Hank Cochran: With a Little Help from His Friends. Glenn Martin, producer. *Capitol ST 11807, \$7.98. Tape: 4XT 11807, 8XT 11807, \$7.98.*

What with Willie Nelson's rise to stardom, Hank Cochran apparently figures that his time has come too. For insurance, he's enlisted vocal assistance from wife Jeannie Seely, Jack Greene (her singing partner), Merle Haggard, and Nelson himself. The liner notes somewhat mysteriously allude to Cochran's hard life; he sure sings as though he's been through something considerable. Only four of the tunes are his compositions; Whitey Shafer's gut-wrenchingly intense *Heaven Was a Drink of Wine* is the album's standout.

Barry Melton: We Are like the Ocean. Barry Melton, producer. *Music Is Medicine Records MIM 9007, \$7.98. Tape: 5 372-9007, 8 372-9007, \$7.98. (MIM records, c/o First American Records, 725 South Fidalgo, Seattle, WA. 98108.)*

Anyone not familiar with Barry Melton and his stint as lead

guitarist with Country Joe and the Fish might be pleasantly surprised to find an unreconstructed folkie with a voice quite like Arlo Guthrie's. The album, too, is in the vein of Guthrie's artier efforts, though with cheaper and less cluttered production. It's a good bet for fans of the genre.

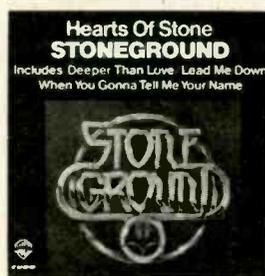


Larry Coryell and Philip Catherine: Splendid. Siegfried E. Loch, producer. *Elektra 6E 153, \$7.98. Tape: TC5 153, ET8 153, \$7.98.*

Like its predecessor, this collaboration takes guitarists Coryell and Catherine far outside of their usual sessionmen contexts and is a lot better for the distance. In addition to several originals, there are thoughtfully chosen compositions by Jimmy Giuffre, Django Reinhardt, and tango king Astor Piazzolla. There's no sweat here, no funk, and no attempt to do anything other than show two gifted instrumentalists playing off one another and achieving a kind of music that transcends categorization.

Tony Orlando, Jerry Wexler & Barry Beckett, producers. *Elektra 6E 149, \$7.98. Tape: TC5 149, ET8 149, \$7.98.*

Orlando's fine rhythm & blues voice and Wexler's indisputable affinity for some of the early-Sixties classics suggest that this album should be better than it is. Holding it back is a tendency to play it safe with such Vegas-slanted tunes as *Don't Let Go*, *Let the Good Times Roll*, and *A Lover's Question*, all of which would have been more appropriate on a Dawn album. When Orlando, Wexler, and the Muscle Shoals musicians head for the harder stuff, like *Since I Met You Baby*, *You're So Fine*, and *I Count the Tears*, their potential is far more fully realized. For the next album, Tony and Jerry may feel free to contact me for a list of songs from the era, like *Another Night with the Boys*, Allen Toussaint's *Every Day*, or *Tell Him I'm Not Home*. It'll be a killer.



Stoneground: Hearts of Stone. Bob Gaudio, producer. *Warner Bros. BSK 3187, \$7.98. Tape: M5 3187, M8 3187, \$7.98.*

The first major-label album from this long-established San Francisco band is a surprisingly faceless but well played affair. Part of the problem might be that Stoneground's personnel has changed so many times over the years, though the current members—Jo Baker, Annie Sampson, and Sammy Piazza—have strong reputations. Unfortunately, they simply fail to produce in this context. Which is not to say that they won't in the future—the band is worth watching.

Books

JAZZ STYLES. By Mark C. Gridley. Prentice-Hall, 421 pages, \$12.95 (\$8.95 paperback).

In recent years the growing popularity of jazz has prompted many unnecessary rehashings of previously published volumes on the subject. This is luckily not the case with *Jazz Styles*, which should find a well-deserved place in jazz-education classrooms in addition to serving as a great home source book.

As a professor of music at Case Western Reserve, Mark Gridley writes from an authoritative position. Unlike many other authors, he attempts to reach the novice and pro alike, intelligently explaining all facets of the music in a concise, yet thorough manner. Chapters range from "Appreciating Jazz Improvisation" to "Guide to Record Buying," and Gridley's insights on Duke Ellington, Count Basie, Miles Davis, Ornette Coleman, John Coltrane, Charles Mingus, Bill Evans, Sun Ra, Cecil Taylor, etc. are excellent. He also discusses jazz education in the '60s and '70s and traces periods of musical expansion including Swing, bop, jazz in the '50s, and big bands. In his explanation he thoroughly investigates sidemen who developed out of specific bands and relates the effect they had on other musicians and jazz history in general. In the process, he presents jazz not as a fragmented, easily categorized art form, but as a music with no boundaries.

Other plus factors include a glossary of basic musical terms and slang, a listing of available jazz magazines, importers and rare-record dealers, a good listing of important albums, and seldom seen photographs. If the book has one flaw, it's the exclusion of the fusion scene that has become a very large part of jazz in recent years—whether or not diehards wish to embrace it. But overall, this is perhaps the most important jazz research book since Leonard Feather's *Encyclopedia of Jazz*.

JIM FISHEL

LISTENING TO JAZZ. By Jerry Coker. Prentice Hall, 148 pages, \$8.95 (\$3.45 paperback).

If you manage to get past this most uninspiring of titles, you'll find yourself on a delightful guided tour through the mechanics of making jazz. *Listening to Jazz*, authored by jazz musician Jerry Coker, describes in lucid detail the various devices musicians use in improvising on a song. In a chapter titled "Formal Structures in Jazz," he discusses the dif-

ferent song forms that provide bases for improvising: AABA, certainly the most common form, is broken down line by line to illustrate exactly how it works. Coker describes what might be done at the resting points (turnarounds) or at the end of a complete thirty-two measure segment (chorus). Chord progressions and how they relate to the different styles are also explained. For example, Freddie Hubbard's *Mr. Clean* uses only one chord throughout the song, while John Coltrane's *Giant Steps* uses fifty-two.

Coker's account of the movement from Swing to bebop and the inherent decline of the popularity of jazz is thorough and objective. So is his coverage of improvisation methods in the chapters titled "The Improvised Solo" and "The Improvisers' Hall of Fame," in which specific solos by five great musicians including Louis Armstrong, Charlie Parker, and Coltrane are cited. His glossary of jazz terminology blessedly ignores "dig," "slip me five," and the like, and confines itself instead to "change-running," "harmonic rhythm," and other terms any serious listener will find useful. Perhaps the best part of this book is that the author mentions recorded performances that will illustrate his points, almost all available from a single source—the famous Smithsonian Collection of Jazz. (This collection is the single most important tool in learning about jazz styles. If you don't own it, buy it.)

Even if you're only a curious listener, I recommend *Listening to Jazz*. If you are a jazz musician or are studying to become one, it will tie up a lot of loose ends and show you, note by note, what Trane did on *Acknowledgement*, what Miles did on *Straight, No Chaser*, and what Louis did on *Shine*. Those sections alone are worth the price of the book. The writing is delightfully free of value judgments, stylistic prejudices, and personal anecdotes ("I played Bird's ax, man..."). Coker presents his subject in the spirit that it is played: He lays it out, and you take what you need. Don't let this book get past you.

FRED MILLER

HONKERS AND SHOUTERS: THE GOLDEN YEARS OF RHYTHM & BLUES. By Arnold Shaw. Macmillan Publishing Co., 555 pages, \$19.95 (\$9.95 paperback).

Most of the areas discussed in *Honkers and Shouters* have been covered before in various books on the blues, gospel music, rock & roll, and soul—but only

peripherally. Arnold Shaw focuses directly and in detail upon a crucial period of black (and therefore American) music history.

His first section, "The Roots," moves through a discussion of 1930s city blues to chapters on boogie-woogie, the blues bands, and Louis Jordan. Shaw is particularly fine on bands, some of which—Erskine Hawkins', Cab Calloway's and Lucky Millinder's—have tended to be undervalued by jazz critics. He links the birth of rhythm & blues with Pvt. Cecil Gant, a late-World War II singer whom he sums up with a phrase that also sums up a change central to r&b's development: "a sepia crooner with blues inflections and a black sound." From Gant on, they're all here: Wynonie Harris, T-Bone Walker, Johnny Otis, Sam "the Man" Taylor, Little Richard, Antoine "Fats" Domino, Sam Cooke, the Ravens, the Orioles, John Lee Hooker, Frankie Lymon, Chubby Checker, and so on.

Honkers and Shouters is a book of considerable importance. Its subject remains one of the few neglected aspects of U.S. music, and Shaw (who was an r&b producer for many years) knows it inside out. Interviews with such veterans as Louis Jordan, B. B. King, and Ruth Brown are enlightening. Yet even more important is the wealth of material on record companies, producers, and others who, though normally ignored by writer/historians, exerted almost as much influence on the general direction of music as the artists did (especially in a "commercial" field like r&b).

The book is not a quick read. Everything and everybody is here, so depending on how you feel about the music, the going will be either heavy or totally compulsive. In places Shaw's style reads like the worst examples of liner-note writing—he describes the Apollo Theater, for example, as a "temple of black entertainment." His examination of 1930s blues is overlong considering how often it has been covered before, and his fascination with informational trivia often clutters an already dense narrative.

Polemic also gets the better of him occasionally. Though Shaw is very sound on the endless pop ripoffs of r&b, his contention that early rock & roll was a straight steal from r&b rather than a blend with hillbilly music doesn't stand up. Nevertheless, *Honkers and Shouters* is in the best tradition of jazz and blues history: valid as advocacy journalism and a gold mine for reference.

JOHN STORM ROBERTS

Continued from page 163

The title cut works better. From the strutting intro, with its reeling, acidic guitar strums, it develops an odd, dreamy quality out of repetitive lyrics, adhesive guitar theme, and sparkling brass punctuations. This is one of those l-o-o-ng pieces whose function is the dance, and its languid pace induces a looseness that keeps fatigue at bay. But like the album as a whole—and unlike the Ohio Players' earlier ones—*Jass-Ay-Lay-Dee* doesn't really build toward anything at all. For which cute spellings are no substitute. J.S.R.

JAZZ

Chick Corea: Friends. Chick Corea, producer. Polydor PD 1-6160, \$7.98. Tape: •• CT 1-6160. •• 8T 1-6160, \$7.98.

What a pleasure to hear Chick Corea play straight-ahead jazz again. No over-cluttered album concepts, no dense-textured arrangements, no messages—just the pleasure and joy of four compatible and highly gifted musicians working together.

I was beginning to have my doubts about Corea's abilities. His last few albums wandered so far away from the natural melodic bent evidenced on his early work that I suspected that mass-appeal compromise was lurking in the shadows. With "Friends," however, he dispels all doubts. Songs like the delightful title tune (which bears traces of Chuck Mangione), the Latin-influenced *Sicily* and *Samba Song*, and the lovely *Waltz for Dave* (dedicated to Dave Brubeck) are rich with the memorable melodies that are the guts of any composer's real talent.

The ensemble also shines. Bassist Eddie Gomez has grown enormously since his years with Bill Evans; he does more with an acoustic bass than most players can with an electric. Steve Gadd probably has recorded more sessions than any drummer in New York City, but he never loses his enthusiasm or the crisp, biting drive that is his most attractive quality. And Joe Farrell continues to be as good as almost anybody on practically any woodwind instrument. (Would that he played this well on his own, over-produced, recordings.) All in all, a reassuring reminder that Chick is one of the finest musicians of the Seventies. D.H.

Gil Evans/Gary McFarland: The Great Arrangers. Michael Cuscuna, producer. *Impulse IA 9340/2*, \$8.98 (two discs).

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Tape: ●● 5 9340/21A, ●● 8 9340/21A, \$8.98.

Quincy Jones: The Quintessential Charts. Michael Cuscuna, producer. *Impulse IA 9342/2*, \$8.98 (two discs). **Tape:** ●● 5 9342/21A, ●● 8 9342/21A, \$8.98.

The styles of most of today's big bands—notably Maynard Ferguson, Buddy Rich, Woody Herman—are virtually interchangeable. These two reissues are the work of band leaders who at one time had individualistic concepts, who were not content to be part of a generally gray landscape. Gil Evans and Gary McFarland were fascinating instrumental colorists; Quincy Jones's colors, while not as exotic, were nonetheless enticing.

The Evans pieces, from four 1960 sessions, represent his impressionistic writing at its peak—before it toppled over into the hit-or-miss free jazz that he turned to later. There is a quintessential performance of *La Nevada* (which he used as a theme) and an almost forgotten treasure—aptly titled *Sunken Treasure*—with gorgeously rich ensemble work and an incredibly yearning trumpet solo by Johnny Coles. Also included is a previously unissued performance of Horace Silver's *Sister Sadie* that starts out ploddingly and unpromisingly, comes to life with Ray Crawford's guitar solo, and really takes off with trombonist Jimmy Knepper's entrance. McFarland's pieces were written for and recorded at a 1966 concert in New York, and they all hold up well—from city pastoral to leaping big-band boogie to lighthearted samba. Even the slower material, such as the tribute to trombonist Willie Dennis, has a loose, swinging quality.

Jones's concept of his band was looser and less structured than Evans' or McFarland's, but he had a style and identity that is gorgeously demonstrated on the slow blues, *For Lena and Lennie*. In fact the identity projected by the entire set—some performed by his 1961 band, some by 1956 studio groups—is a mixture of the musical personalities of Quincy and his soloists. This is a striking change from the anonymous, easily replaceable parts of most contemporary bands.

J.S.W.

Red Garland, Ron Carter, Philly Joe Jones: Crossings. Orrin Keepnews, producer. *Galaxy GXY 5106*, \$7.98. **Tape:** ●● 5366 5106H, ●● 8366 5106H, \$7.98.

Red Garland: Red Alert. Ed Michel, producer. *Galaxy GXY 5109*, \$7.98. **Tape:** ●● 5366 5109H, ●● 8366 5109H, \$7.98.

Though pianist Red Garland was a charter member of Miles Davis' classic mid-'50s group, he's made few recordings in recent years. We should offer kudos, then, to Galaxy for providing these two

new outings, both recorded in December of 1977. Alas, there are a few problems. On "Crossings," which reunites Garland with Davis sectionmates drummer Philly Joe Jones and bassist Ron Carter, the jazz is super—prime bebop revisited. Not so for "Red Alert," in which Garland and his rhythm team (Carter and drummer Frank Butler) are obstructed by the remarkably inept playing of saxophonists Harold Land and Ira Sullivan and cornetist Nat Adderley. All three have difficulty playing in tune, and Land plays one of the most painfully struggling im-



Red Garland—prime bebop revisited

provisations on *Stella by Starlight* that I've ever heard from a "name" jazzman.

Fortunately, *Crossings* is well-nigh impeccable. Listen to Garland's brisk, free-flying lines on *Oleo* and *Love for Sale* and his almost note-bending touch on *Never Let Me Go*. He balances these soaring, single-note lines with the rhythmic two-handed chording style that he virtually created. He is matched throughout by Carter's throbbing accompaniments and fleet improvisations. Jones, always better known as an accompanist than a soloist, nonetheless gets loose for a carefully considered Max Roach-flavored solo on *Oleo*. Curiously, Garland, Carter, and Jones have never before recorded as a trio. Let's hope this is just the first of many to come.

D.H.

Oliver Lake: Life Dance of Is. Michael Cuscuna, producer. *Arista/Novus AN 3003*, \$7.98.

Hamiet Bluiett. Hank O'Neal, producer. *Chiaroscuro CR 182*, \$7.98.

Byard Lancaster: Exodus. Tom Buchler & Steve Pross, producers. *Philly Jazz PJ 1001*, \$7.98

It's beginning to appear that the sweet-smelling garden path that led to fusion jazz, jazz/rock, disco/jazz and other, associated oddities, is losing some of its appeal. A new generation of creative jazz musicians, many of them nurtured in New York City's lofts, others long-term

holdouts from the heady avant-garde Sixties, is breaking through to a wider audience. The three saxophonists represented here are typical of that group: None are what might be called new arrivals, each has persisted in retaining a personal and unique aesthetic view.

Oliver Lake, by recording for a major label, has made the biggest breakthrough. His music is a curious mixture of Ornette Coleman-like melodies and compositional calculation. Aided by the excellent and extremely original guitar work of Michael Gregory Jackson, he manages to stay within the listeners' frame of reference while still taking chances. This is particularly true of the start and stop declamations on *Rite-ing* and the dense textures of Jackson's *Tfon*.

Baritone saxophonist Hamiet Bluiett, like Lake, has been active in the lower Manhattan loft scene and is known as an avant-gardist who doesn't mind mixing in a little traditional seasoning. On *Nioka/Duo*, for example, he duets with pianist Don Pullen in a manner that is strikingly reminiscent of Duke Ellington and Harry Carney. The balance of the recording is taken up with stirring, Middle Eastern-styled, rhythm pieces that use collective ensembles in the manner of Sun Ra. Bluiett is the constantly unifying factor, his baritone sax and clarinet raging through the ensemble like a whirling dervish.

Byard Lancaster is one of our most under-appreciated alto saxophonists. A decade ago, he was known in New York as a fine new performer, but since then little has been heard from him. He works in the barest of circumstances here, with only the accompaniment of Harold E. Smith on percussion and Skip Parnell on bass. No problem, for he finds striking new things to do in the hackneyed old tune *Exodus*, and places his feelings on the line in his extended solo passages on *Philly Jazz*. What a shame that his label lacks either the imagination or the capital to record Lancaster with the quality that his music demands. On the other hand, we should be thankful for anything from this gifted musician. D.H.

Joe Venuti: Sliding By. Sam Charters, producer. *Sonet SNTF 734, \$7.98.*

In certain respects, the careers of Joe Venuti and Earl Hines have striking similarities. Both were ground-breaking performers in the '20s—Venuti as the first important jazz violinist, Hines as the creator of a jazz piano style apart from ragtime. Both faded somewhat in the '40s after the Swing Era and, in the '50s and early '60s, virtually disappeared from recording. Both reappeared later in

the '60s and were eventually so over-recorded that there was often little to look forward to in one more disc from either of them. Venuti got trapped into endless repetitions of overplayed dixieland and Swing material, and any color on his sessions came less from his playing than from that of his various sidemen.

I was listening to "Sliding By" on the afternoon of August 15, when a phone call advised me of Venuti's death two hours earlier. It was, for me, the right way for Joe to go, for I had been pleasantly surprised to hear more of the real

Venuti on this record than on most of his latter-day discs. Four of his own compositions in these April '77 sessions are warm melodic pieces that he cannot resist dressing up with a jaunty swagger. They take him back, if only momentarily on *Lover*, to the style of his '20s duets with guitarist Eddie Lang—he is dazzling with his free-for-all bowing, running with his coattails flying. And although the set includes a couple of the dixieland warhorses (*That's a Plenty*, *Clarinet Marmalade*), they are the side dishes rather than the whole meal. J.S.W.

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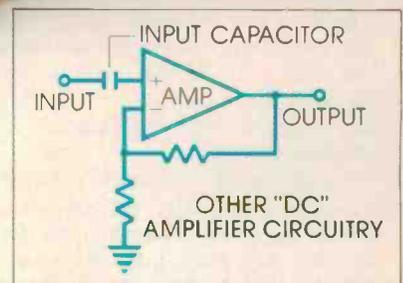
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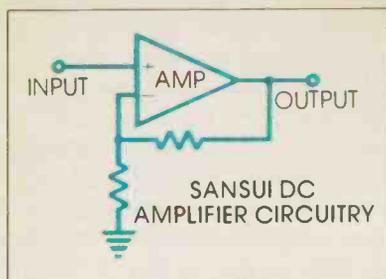
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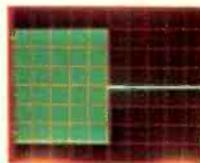
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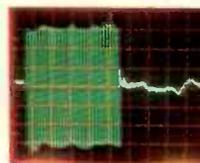
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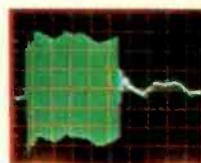
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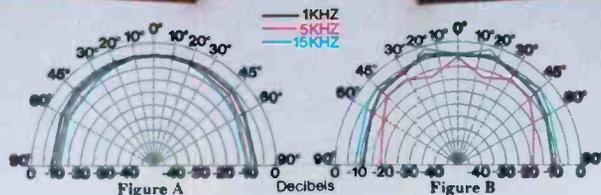
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JUNE 1984

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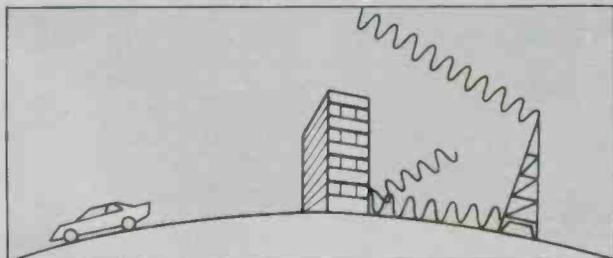
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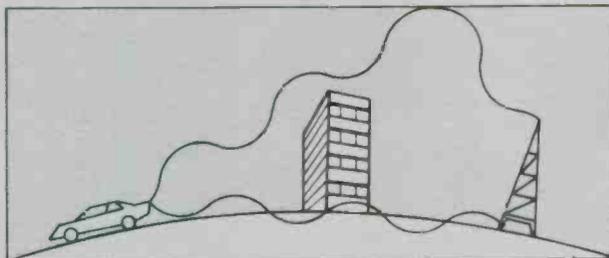
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Peter Aczel *The Audio Critic* Winter 1982-83

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About This Issue

Inside the Pages of June's High Fidelity

THE AMALGAMATION of audio and video continues, spurred by the recent FCC decision approving the transmission of stereo audio as part of broadcast television signals. In other words, the era of stereo TV has officially been launched.

At about the time you're reading this issue—during the first week of June—the Summer Consumer Electronics Show will be under way in Chicago, and from what we hear now, stereo-capable television sets should debut there as flagship models in many manufacturers' lines. A full report on stereo broadcast TV will appear in a forthcoming issue.

Meanwhile, we are seeing the first of the long-awaited VHS Hi-Fi videocassette recorders. Models from at least six companies are or shortly will be available. How the sound quality of VHS recorders was improved to something approaching the Compact Disc's is similar to the method used by Beta Hi-Fi machines, but significant differences do exist. Complete coverage of this new advance in VCR audio includes "How VHS Hi-Fi Works" and an in-depth lab test on Hitachi's VHS Hi-Fi deck.

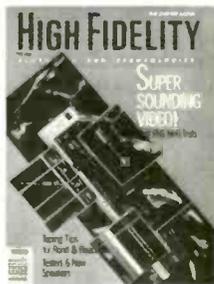
Development continues on new digital products, many of which we won't see for some time. Technical Editor Michael Riggs and Electronics Features Editor Peter Dobbin are just back from two separate trips to Japan, where they saw the latest in Compact Disc technology, prototype digital cassette recorders, and advanced digital TV electronics.

This issue marks the inauguration of a special classical music review section in our MUSICAL AMERICA edition. In that section is an article by Thomas L. Dixon on William Kapell, the great American pianist and RCA artist whose recordings have all but disappeared from the catalog. (Prompted by the knowledge that this article would appear, RCA has announced that it intends to offer a Kapell release before the year is over.) In our regular edition, Paul Hume, music critic emeritus of *The Washington Post*, discusses the new generation of singers represented by Jessye Norman, Barbara Hendricks, and Eva Marton—"A Pride of Sopranos."

The pop music world was saddened by the death of Marvin Gaye, a gifted composer and performer. An appreciation of his prolific career appears in BACKBEAT. This month's interview offers a revealing portrait of Fleetwood Mac's Christine McVie in "Egos Can Be Painless."—W.T.



Technical Editor Michael Riggs is greeted by Ken Suwa of Technics in Osaka, Japan.



COVER DESIGN: Skip Johnston

Cover Photo: Toby Seffel; backdrop, Pamela Margonelli; additional photography, Ronald G. Harris

ON THE COVER: Hitachi VT-88A VHS Hi-Fi videocassette recorder

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Letters

CD Debate

Your reply to G.R. Paterson ["Letters," February] implies negligence on the part of WFMT Radio in handling Compact Discs for airplay. Our experience with a library of more than 300 CDs and seven players may give us the insight to respond correctly to Mr. Paterson's complaint about malfunctioning discs.

First, in defense of our announcers who operate the players, I should point out that standard procedure includes the recommended cleaning, as well as a visual inspection of each disc prior to airing. This does eliminate most dirt- and fingerprint-related problems, but not local defects. Although only 4 percent of our CDs contain defects that render them unplayable on any player we have tried, a much larger percentage are marginal, playing flawlessly on one machine and not on another.

There are two types of local defects: surface flaws (scratches) and information-layer glitches, both of which can cause clicks or even sticking. The only way to tell if a small defect will cause a problem on a given player is to try it. Differences in players' error-correction/concealment abilities determine how audible these defects will be—something your equipment reviews have ignored. Further complicating matters is the fact that internal misalignments caused by physical shock during shipping can impair a player's error-compensation performance. Very few units have passed our rigorous evaluation, involving a test CD with deliberate defects and several with accidental ones.

The real source of the problem Mr. Paterson refers to is hardware inadequacy. The players that WFMT now uses are not the most defect-tolerant we have evaluated, but they are the best we have found that also provide the accurate cueing capability that broadcasters require. Previewing a library the size of ours would take about 40 man-days. With that library constantly growing and a large proportion of our airplay drawn from it (80 percent in January), we have no choice but to replace defective discs as they are found. Until manufacturers begin making players suitable for broadcast use with error correction and concealment geared more to the types of flaws occurring on today's CDs, we face the possibility of airing audibly defective Compact Discs.

James S. Addie
Engineering Department
WFMT Radio
Chicago, Ill.

We did not mean to imply any negligence on the part of WFMT or its staff. Our point was simply that insoluble difficulties are rare, with most CD playback problems arising from soiled (and easily cleaned) discs. Certainly this has been our experience, even when using first-generation players, and the latest models have considerably improved error-correction performance. We do, by the way, test this characteristic and report our findings in our equipment reviews. (The test disc probably is the same one you use.) But we have had very little trouble getting commercial releases to play properly on the dozen or so machines we have evaluated.—Ed.

How can you say that skipping in Compact Disc

players is very rare or that it is due to soiled discs ["Letters," February] when in the same issue Robert Long states quite the opposite in "Cross-Talk"? He says that some models are quite touchy and do skip.

Carol Walker
San Francisco, Calif.

It was clear from the contexts of the two letters that the reasons for the skipping were entirely different: dirt and disc defects in the first case, physical shock in the second. The answers reflect this difference. We would stress, however, that skipping for any reason is seldom a problem under normal playback conditions.—Ed.

I have been disturbed by some recent letters you have printed indicating that there are doubts about Compact Discs and players. I own a Technics SL-P10 and 43 CDs, and I have had only one problem with dropouts and mistracking, which was caused by moisture condensing around the laser-pickup mechanism.

Every disc I own shows some improvement over conventional LPs, particularly in high-frequency clarity, bass response, and noise (which is totally absent on CDs, except for master-tape hiss). Classical digital releases are truly awesome. Audiophiles and serious music listeners should do themselves a favor and buy now.

Charles M. Ellis
Langford, Bedfordshire
England

Wanted: Talented Tenors

Will Crutchfield knows opera. More than that, he knows voices. In "Martini & Rossi's Vintage Voices" [April], he effectively pinpoints the most serious shortcomings in opera today.

The fact that today's singers are "markedly lower in their vocal aptitude" can indeed be most effectively illustrated by reviewing the current crop of tenors. Like Crutchfield, perhaps we can begin by placing Pavarotti in first place (that is, the Luciano of ten years ago) and by asking who indeed would be the other top names.

At their best, Domingo and Carreras, the other two tenor "superstars" of both performances and recordings, can be compared comfortably only to the earlier generation's "second string" singers. While it's no insult to be able to sing like Prandelli, Raimondi, Prevedi, and Filippeschi, "superstar" status this was not then and should not be today. That the art of singing opera is now presented to the public by "second string" vocalists masquerading as world-class tenors is a lamentable fact and one that supports Crutchfield's speculation that "a nation's great vocal traditions can die." Unfortunately for us all, it is in this case the world's vocal tradition that has noticeably deteriorated.

Domingo came into prominence by replacing the indisposed Corelli, but certainly never succeeded in taking on that magnificent vocal savage's mantle. And who replaced the honeyed, lyrical tenorizing of Di Stefano, Bjoerling, Valletti, and Tagliavini? Pavarotti? Maybe in some earlier life, but not today. Who equals the elegant refinement of Bergonzi's vocalizing or that of Tucker's big-voiced excitement? Carreras? Hardly, even though he possesses the most naturally beautiful voice of today's three biggies. And why should we wonder when young, newly found heldentenor Peter Hofmann admits that he

would very much like to have a double career—that of Wagnerian tenor and rock and roll star. Well, I've heard Peter sing Lohengrin and would like to wish him all the success in the rock field.

It takes a lot of superb marketing to sell second-string singers as first-rate, world-class vocalists. Domingo records with John Denver and makes movies. Pavarotti marches as Grand Marshal in Columbus Day parades, talks to Johnny Carson, and, to his eventual embarrassment, obviously okayed the massively aggressive repackaging after repackaging of his recordings.

That Pavarotti's *Yes, Giorgio* bombed and that he was booed at La Scala in *Lucia di Lammermoor* (a role custom-made for his earlier voice) shows us that the operatic audience is not altogether insane.

Franco Corelli, where are you when we need you?

George Martynuk
New York, N.Y.

Not on His Toes

Thanks to Matthew Gurewitsch for a very thorough and thoughtful review of the original-cast album of *My One and Only* [April]. However, *On Your Toes* is not a bona fide Gershwin revival! It is a bona fide Rodgers and Hart revival.

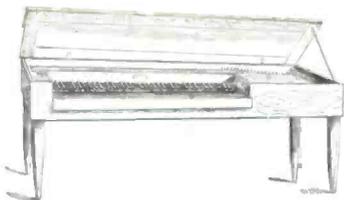
William A. Johnson
Manhasset, N.Y.

In his review of *My One and Only*, Matthew Gurewitsch suggests that you can "spend an evening at the current bona fide Gershwin revival of *On Your Toes* and learn what real boredom is." I guess so: He was too bored to notice that the show was written by Rodgers and Hart.

It's a shame that people who know enough not to credit *Norma* to Donizetti or *Oiello* to Wagner (or "Rubber Soul" to Elvis Presley) can be so casual concerning an American art form. For that matter, Gershwin's song is no more "Sweet 'n Low Down" than the Beatle number is "Twist 'n Shout." (Try singing either.) When will shows be given the respect all other music receives?

Richard E. Sebolt
Springfield, Mass.

Mistaken Identity



I am very sorry (and very embarrassed!) that we inadvertently supplied you with an engraving of an 18th century harpsichord instead of a clavichord ["The Keyboard, Baroque and Before," April]. Here is a picture of a clavichord to set the record straight.

David Greenstein
Director, The Bettmann Archive

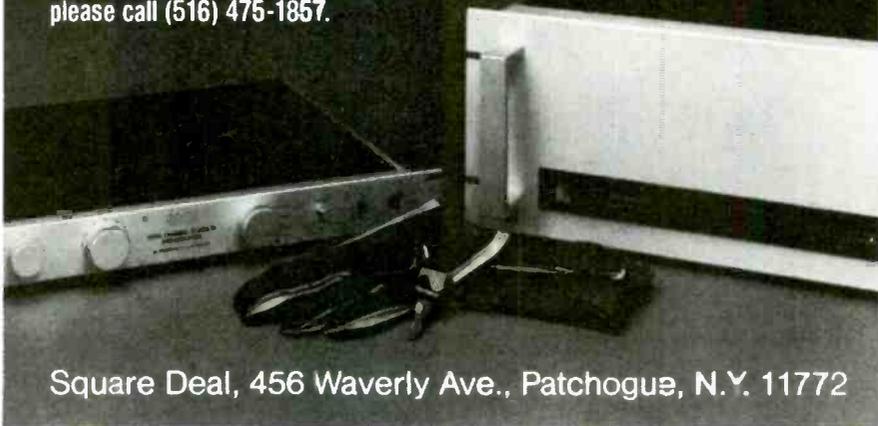
Letters should be addressed to The Editor, *HIGH FIDELITY*, 825 7th Ave., New York, N.Y. 10019. All letters are subject to editing for brevity and clarity.

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It is fitting that Perreaux of New Zealand, Awarded the Aud o/Video Magazine Hi Fi Grand Prix for its "Mercedes-like construction," introduce Sound Leasing — the first leasing program in the history of audio.

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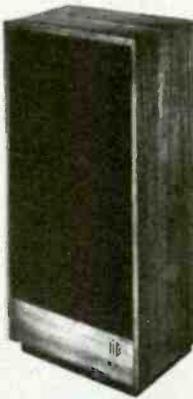
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This rather basic precept has always created a lot of havoc for people trying to get good, clear, clean sound on their car's FM tuner.

Because the farther you get from the station transmitter, the weaker the station's signal becomes.

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Of course, if you do get lucky and get clean reception, you immediately reach over and crank up the volume to take advantage of this situation.

Leading directly to the other problem. Speaker distortion.

Of course, you do have options in solving these problems. You can find a drive-in radio theater.

Or better yet, you can equip your car with a new Pioneer sound system. A system that features Supertuner™ III and Maxxial™ speakers.

Supertuner III is an FM stereo car tuner with reception so clear, you'll think you're listening to a cassette.

Because Supertuner III virtually eliminates three-signal-intermodulation, multipathing, and loss of weak signals. In other words, all the aggravating things that cause you to bang your fist on the dashboard of your car.

No other car tuner can do this. At any price. None. A fact that Pioneer

continues to prove in road tests against the highest quality tuners currently on the market. Time after time in these tests, Supertuner III is the clear winner.

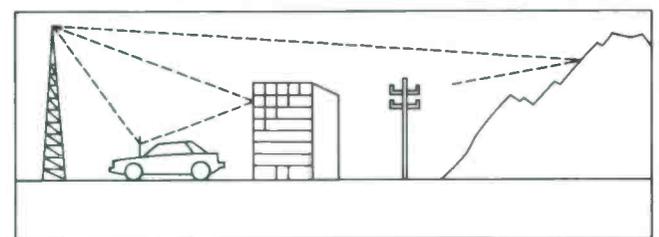
But what good would this be, if the speakers put back in what Supertuner III has taken out.

That's why you need Maxxial speakers. Extremely efficient speakers that can handle up to 100 watts of Max Music Power. A rating system comparable to one of those used to measure the power handling of Pioneer home speakers.

Which means that you can boost the volume on your favorite song (now that you can receive it clearly) and still get clean, undistorted sound.

Maxxial speakers are a complete line of the most popular sizes. With compact yet powerful Strontium Magnets that enable their big power handling capability to fit into tight spaces. And our line of

universal fit Supertuner IIIs offer digital display, electronic pre-set tuning, auto reverse decks with Dolby.* And more.

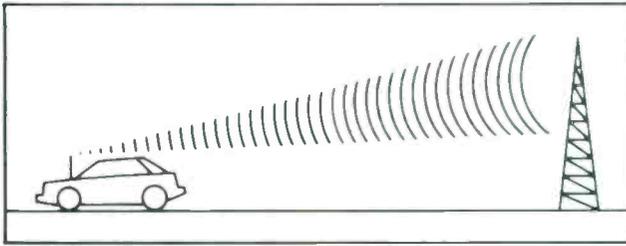


A lot of things stand in the way of clear reception. Like buildings, mountains, even telephone poles. Radio signals bounce off them like balls on a handball court. Creating static, signals cutting in and out. Unless you have a Supertuner III.

universal fit Supertuner IIIs offer digital display, electronic pre-set tuning, auto reverse decks with Dolby.* And more.

So if you want to hear music the way it was recorded and broadcast in the first place, take this word of advice.

Park the system you have in your car. And get moving on a new one from Pioneer.



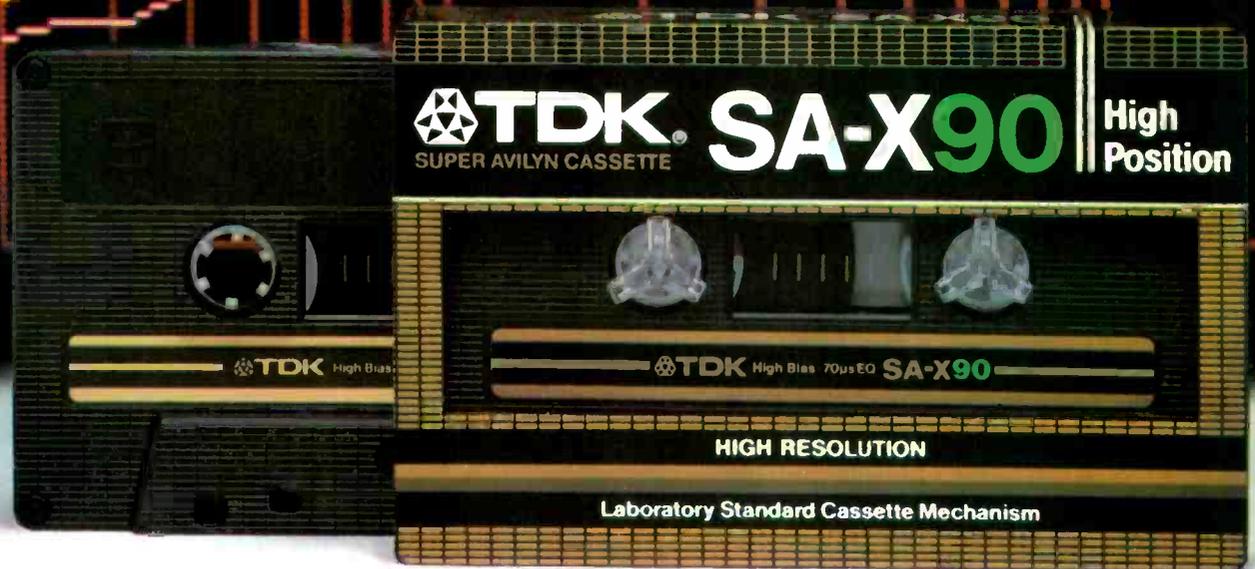
Cars move and radio stations don't. So the further you drive from the transmitter of your favorite station, the harder it is to capture its signal. Unless you have a Supertuner III.



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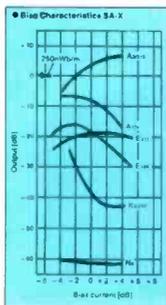
*** TDK AUDIO (MOL) TEST
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Sonic Tonic from TDK



What comes out of your audio cassette deck is only as good as what goes in. And if you want unmatched dynamic performance, you need the highest performance audio cassette you can get. You need a TDK Pro Reference Series cassette. Each is designed to maximize the untapped potential of your cassette deck by generating clear, crisp, full-bodied sound.

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Currents

News, new products, and new technologies

FCC Approves Stereo TV

A recent ruling by the Federal Communications Commission paves the way for the start of stereo TV broadcasts. Although the FCC refused to endorse as a standard the Zenith/DBX broadcasting technique recommended by the Electronic Industries Association (EIA), it ordered that no competing system could jeopardize the integrity of the pilot tone used in the Zenith/DBX approach. As in stereo FM broadcasting, the pilot tone of a stereo TV transmission automatically activates a receiver's multiplex decoder for correct reception.

By its protection of the Zenith/DBX system, the FCC's ruling is being read by industry observers as tacit approval of an approach that has already been agreed upon as the ad hoc standard by an industry-wide committee composed of broadcasters, trade associations, and manufacturers. Formed by the EIA, the Broadcasting Television Systems Committee (whose initials will probably form the generic name of the multichannel TV technique) spent five years reviewing and testing various approaches. The Zenith/DBX system that it chose is compatible with current mono receivers and offers three channels of audio information (two for stereo and one for a second-language soundtrack) when properly decoded. Its sound quality is said to be comparable to that of current stereo FM broadcasts.

Transmission of stereo TV could start as soon as this summer, and manufacturers will soon be offering add-on decoders, such



as Sony's \$200 MLV-1100 (pictured here), for receivers equipped with multiplex-adaptor jacks. TV receivers with built-in decoders should be available by the fall.

If you're a cable TV subscriber, you'll have to wait a good deal longer to receive broadcast stereo TV programs. Because of the signal processing done by cable operators, which includes steep filtering so that broadcasts can be accommodated on adjacent channels without interference, the stereo audio information would be seriously degraded. Add to that the additional noise introduced in cable transmission, and the picture for accurate decoding at home grows even dimmer. There's also a problem with the current generation of baseband cable-TV converters used by about five million cable customers. According to Wendell Bailey of the National Cable Television Association (NCTA), baseband converters simply cannot be made to pass a stereo signal.

Don't despair, however. The NCTA fully endorses the Zenith/DBX system. According to Bailey, the cable industry will respond to the challenge of stereo TV by developing new equipment and techniques. But the timetable for these changes will be determined by consumer interest in the new system. Specifically, says Bailey, the industry will use sales of stereo-TV multiplex decoders and stereo-ready TV sets as its index.



Bose on the Road

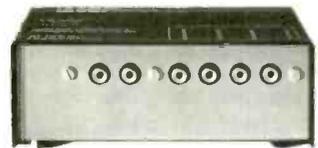
If your car radio/tape player is working well, but you're still not satisfied with the sound of your mobile music system. Bose has a solution—the Model 1201. Consisting of a 25-watt-per-channel equalized

amplifier and a pair of 4½-inch door-mount or 6-by-9-inch rear-deck speakers, the \$300 system is said to be suitable for most small and medium-size cars. For larger cars or vans, Bose offers the 1401 system, which consists of a four-channel, 100-watt booster/equalizer and four speakers. For more information, write to Bose Corp. (100 The Mountain Rd., Framingham, Mass. 01701).

RCA Stops CED Player Production

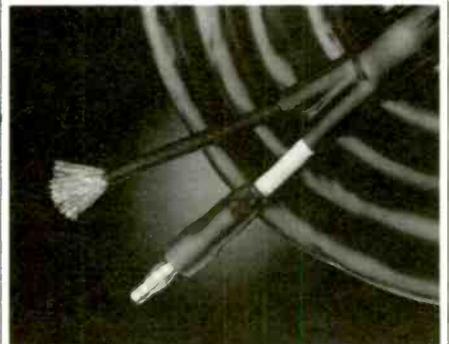
Citing "continuing financial losses and narrowing prospects that the business would turn profitable," RCA has ceased production of its CED videodisc players. By the time RCA's inventory of 12,000 players is sold out, there should be a total of some 700,000 units in consumers' homes.

To support this population of players, RCA plans to keep pressing new CED titles for three years or "as long as reasonable demand continues." And CBS has indicated that it, too, will maintain production of CED videodiscs. To stimulate the demand for its discs, RCA will continue its emphasis on \$20 titles, and owners of CED players will receive periodic mailings outlining new offerings.



Biamping for Beans

Affordable electronic crossovers are relatively scarce these days, so we were delighted to learn of Ace Audio's Model 6000-SF. The \$180 device is intended for speaker biamping and is available with crossover points at any frequency from 200 Hz to 1.8 kHz via plug-in 12-dB-per-octave filter modules. The unit is also equipped with an infrasonic filter to remove unwanted signals below 15 Hz. Level controls on either the high- or low-frequency outputs are available as options. For more information, write to Ace Audio (532 Fifth St., East Northport, N.Y. 11731-2399).



Brand-New Monster

Monster Cable says its new Powerline 2 speaker cable "aligns the high and low frequencies . . . [so that they] travel at the same speed through the cable for dramatically improved frequency response and imaging." Powerline 2 is available in a variety of lengths, at \$2.75 per foot, and with various tip terminations. For more information, write to Monster Cable (101 Townsend St., San Francisco, Calif. 94107).



High-Tech Video

Ultraportable 8mm video systems will face stiff competition from the VHS camp when JVC's one-piece VideoMovie camcorder (camera-recorder) appears this summer. The \$1,400 GR-C1U weighs in at 4.3 pounds and uses a compact VHS-C cassette that, when fitted into a special caddy, can be played in standard VHS decks. Direct connection to a TV set is also possible. The new system uses a head drum only 41mm in diameter (as compared to the 62mm of home VHS decks), but manages to maintain adequate recording bandwidth by using a faster drum speed (45 rotations per second instead of 30) and a tape wrap of 270 degrees instead of 180.

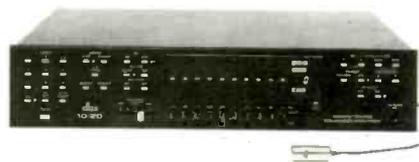
The GR-C1U is equipped with a detachable electronic viewfinder, a 1/2-inch Saticon pickup tube with a rated sensitivity of 15 lux, a 6:1 power zoom lens, and an automatic iris control. The camcorder's

viewfinder can also be used for playback, and shuttle-search and still-frame modes are available. The TC-20 VHS-C cassette used by the camcorder allows for 20 minutes of recording.



Also new from JVC is the HR-D725U, a tabletop VHS deck with the remarkable VHS Hi-Fi (audio frequency modulation) stereo recording system. (See "How VHS Hi-Fi Works," page 41.) To maintain compatibility with standard VHS Stereo decks, the new unit is also equipped with a pair of fixed audio record/play heads and switchable Dolby B noise reduction. Other features of the HR-D725U include a 139-channel tuner, a 14-day/8-event programmable timer that even selects the appropriate recording mode (EP or SP), and variable-speed visual search. The unit's timer can be set for unattended turn-off in 30-minute increments up to four hours. The HR-D725U has direct camera connections and costs \$1,400. For more information, write to U.S. JVC Corp. (41 Slater Dr., Elmwood Park, N.J. 07407).

more information, write to Aiwa (35 Oxford Dr., Moonachie, N.J. 07074).



Better and Cheaper From DBX

With more features and a lower price, the new DBX 10/20 computerized octave equalizer seems an altogether welcome follow-up to the original Model 20/20. The new unit automatically equalizes the left and right channels either individually or in combination. It can analyze the response at as many as ten locations within a room and then set itself for an averaged flat response, and it can store as many as ten separate equalization curves in memory. The \$1,200 digitally controlled device also has a real-time spectrum analyzer function, displaying the relative levels of ten frequency bands. For more information, write to DBX, Inc. (71 Chapel St., Newton, Mass. 02195).

Old Is New Again

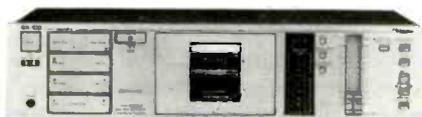
Last seen in the early '50s, Jensen's G-610 speaker system is available again for collectors of vintage audio equipment. The "new" G-610 is being built with the same components and to the same specifications as the original model. A triaxial design using a 15-inch woofer, the system is said to have a sensitivity ("efficiency") of 101 dB for a 1-watt (0-dBW) input. Jensen will not give a price for the system, saying only that the speakers are hand-built to exacting standards and are priced accordingly. For more information, write to Jensen Sound Laboratories, International Division (4136 N. United Parkway, Schiller Park, Ill. 60176).

capstan transport and a motor-driven cam control system. Most important for quality-conscious recordists, the deck has internal trim pots that enable qualified technicians to adjust bias and recording levels individually for your favorite Type I, 2, and 4 tape formulations. The two-head deck is equipped with a two-speed master fader, an automatic repeat function for replaying an entire side or any portion of it, Dolby B, and a defeatable multiplex filter. For an additional \$150, the BX-150 adds Dolby C and an output-level control. For more information, write to Nakamichi U.S.A. Corp. (1101 Colorado Ave., Santa Monica, Calif. 90401).



A VCR-cum-Computer from RCA

Possibly the most computerized VCR we've ever seen, RCA's VKP-900 uses your television screen to display status messages and timer-programming menus. This capability enables you to program the VCR (for as many as eight events over a 12-month period) from your easy chair via the unit's hand-held remote control, with confirmation of each step easily visible on your TV screen. The \$1,300 VKP-900 is the second "convertible" model from RCA: Its recording section can be removed from a special tuner/timer cradle, thereby converting to portable use. The VHS unit is equipped with a 133-channel tuner, fixed-head stereo recording capability, and a scene-transition stabilizer for glitchless edits. For more information, write to RCA Consumer Electronics (600 N. Sherman Dr., Indianapolis, Ind. 46201).



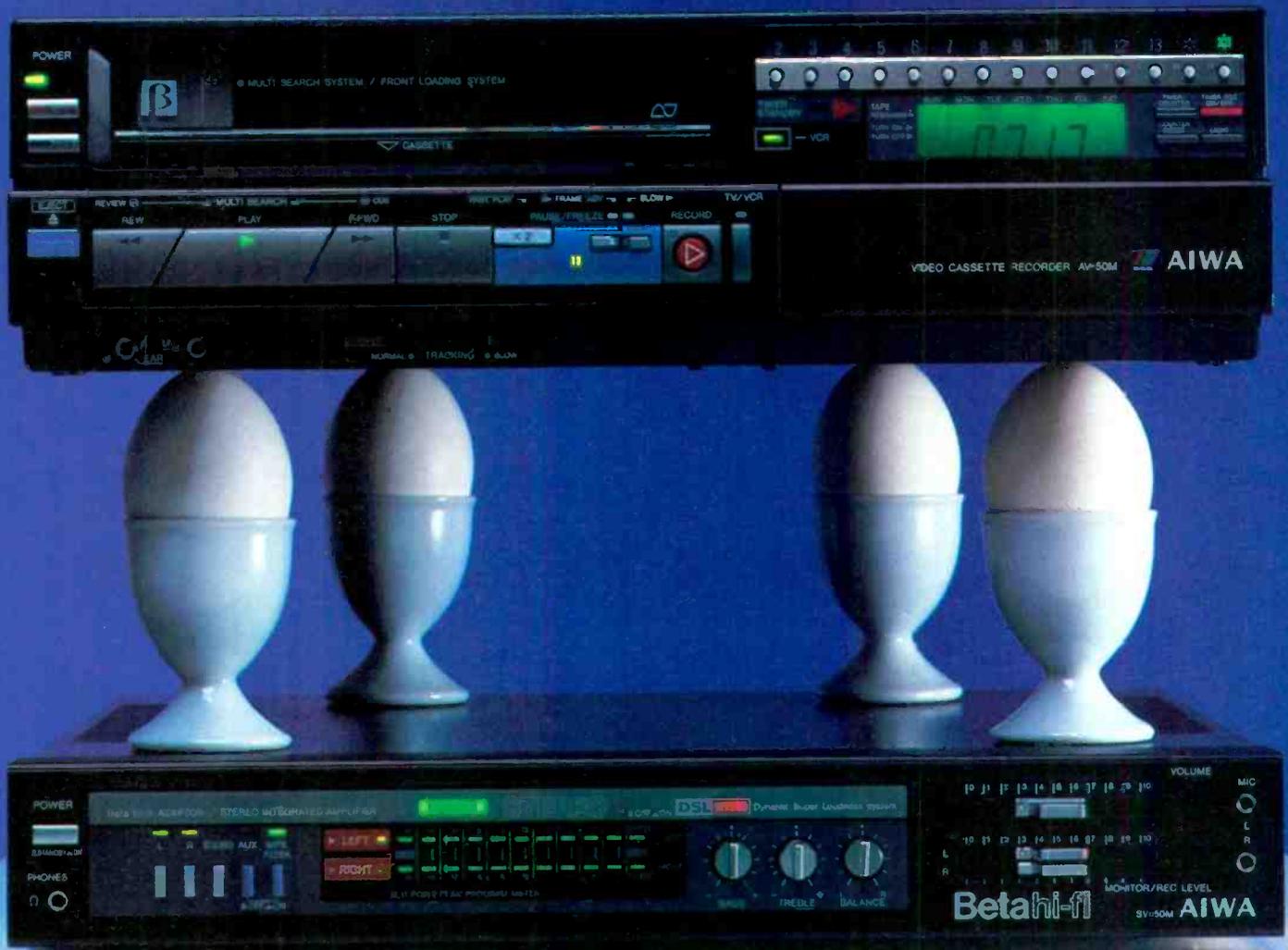
High Performance On a Budget

About \$50 more expensive than the earlier BX-1, Nakamichi's new BX-100 still seems a remarkably good value at \$350. The BX-100 uses a three-motor, single-

An Aiwa Camera

Weighing in at 3 1/2 pounds, Aiwa's CV-5M is the natural complement to Aiwa's first VCR—the Beta-format V-50 we reviewed in our April issue. The camera uses a 1/2-inch Saticon pickup tube with a low-light sensitivity rating of 60 lux. Its motor-driven zoom lens has an 8:1 focal-length ratio and is equipped with macrofocus capability. The lens's automatic iris control can be defeated for manual fade-ins and fade-outs. The \$950 camera also is equipped with a boom-mounted electret microphone and automatic white-balance circuitry. For

We rest our case.



Aiwa introduces the smallest, lightest Beta hi-fi portable video in the world*

Aiwa's new Beta hi-fi portable certainly is small, but when it comes to performance and features, it's definitely in the big time.

For breakthrough sound quality, a single connection to Aiwa's full-featured Beta hi-fi amplifier unleashes this little portable's state of the art audio technology. It actually outperforms open reel audio decks!

To match this audio technology Aiwa offers brilliant picture quality and outstanding special effects. There's 2X speed playback with sound, auto program location, insert editing and a 15X or 25X normal speed multi-search feature. And that's not all.

Unlike conventional portable VCRs that require a separate tuner for playback, the Aiwa AV-50M video deck has its programmable tuner/timer built-in for *true* portability.

It can go from room to room, from house to house. Not just for recording (that's just half the story), but playback too (that's all the fun!). What's more it's already equipped to receive stereo TV broadcasts as soon as they hit the airwaves.

The Aiwa Beta hi-fi video portable is also the perfect match for Aiwa's critically acclaimed S.P.A.N. audio systems. Same convenient size! Same advanced styling.

Aiwa's new Beta hi-fi video system...a really fresh idea. For your nearest Aiwa Beta hi-fi video system dealer call:

800-633-2252 ext. 300

*Weight and size comparison does not include AC powered SV-50M Beta hi-fi amplifier/adaptor.

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*Dolby noise reduction. Dolby is a registered trademark of Dolby Laboratories Licensing Corp.



Electrical and Electronics Division

The Autophile

Going on the road with stereo by John Bishop

Is Car Stereo Ready for the Compact Disc?

AT THE WINTER Consumer Electronics Show, five manufacturers displayed working prototypes of Compact Disc players for the car. Kenwood, Mitsubishi, Panasonic, and Philips claim that they will deliver finished products late this year or early in '85, while Fujitsu Ten already is supplying Toyota with CD players for factory installation in some Supras and Cressidas in Japan. Clearly, the car stereo industry is poised for the appearance of this exceedingly high-technology mobile music source.

micron-level tolerances, survive a Chicago pothole (much less a New York City crater)? Probably not, but neither can a cassette transport nor most heavy-duty shock absorbers.

Also worrying is the potential for noise pickup. Can a CD player's electronics effectively reject alternator whine and the other contaminants created by a car's electrical system? The suppliers showing prototype players all say "no problem." And the durability of the discs themselves will be tested as dust, fingerprints, and the occasional soft drink mar their pristine plastic coating. In my own experience, however, even heavily soiled CDs have been restored to playability with a quick wipe or wash. By way of contrast, just try resuscitating a cassette that has accidentally landed in a cup of cola.

frequencies. In fact, at mid and high frequencies—the critical zone for realistic reproduction—noise is about 15 to 20 dB lower.

What this means is that we really have to contend with an effective noise floor in the critical range of 40 dB or less. Romantic symphonies with a dynamic range of more than 90 dB will still put excessive strain on a car amplifier and speakers—not to mention your ears—but much classical music never exceeds 60 dB or so, and a pop recording with more than 20 to 30 dB of dynamic range is extraordinary. So CD playback levels would rarely exceed 100 dB on the loudest transients; for extremely wide-range music perhaps manufacturers will have to start offering variable compressors in their car CD players.

Even with a more realistic view of the peak power requirements necessary to accommodate CD playback in a car, the basic qualities inherent in the digital medium will put a premium on car stereo electronics. To get the best from CDs, you'll have to select an honest amplifier—that is, one whose distortion and output capabilities on the road remain true to the manufacturer's spec sheet. And, although most well-made car speakers should be able to withstand the occasional extra stresses of a CD's uncompressed transient peaks, you'd miss out on another benefit of the CD system if you settled for a traditional speaker setup.

A CD player's precise channel balance and frequency response can generate stable and convincing stereo effects, but stereo usually won't work if you're seated two feet from one speaker and five feet from the other, as is the case with typical front speaker installations. Rear-deck speakers improve the geometry a bit, placing you five feet from one and seven feet from the other. Direct-radiating satellites that can be angled so that they fire toward the listener seated at the opposite side in front will further improve the stereo effect by broadening the imaging area. And a front-imaging arrangement using three satellites in a left-right-left configuration can also give good results. However, all of these stereo configurations require the use of a separate subwoofer and amplifier, since satellite speakers must be small for proper placement.

In sum, the Compact Disc's imminent arrival on the car audio scene signals major advancements in an environment where high-fidelity reproduction currently comes only with great expense and care. But to realize these benefits will take some innovative thinking from hardware manufacturers and consumers alike. **HF**



Most of the prototype car CD players we've seen are dedicated devices—that is, they complement existing car-stereo systems by adding CD playback. This Fujitsu Ten unit goes one better by combining an AM/FM tuner and CD player in one chassis, with some multipurpose controls. And models that add tape playback should appear soon.

But is it the right technology for the road?

In several respects, the answer is an emphatic yes. The CD system's incredibly low distortion, wide dynamic range, ten-octave bandwidth, and intrinsic immunity to wow and flutter make it clearly superior to the Compact Cassette. A glance at the frequency response curves of a HIGH FIDELITY car stereo test report is sufficient to see how poorly the cassette decks in some front ends perform. Factor in the vagaries of azimuth alignment and Dolby mistracking, and a cassette player's performance can plummet from poor to horrendous in a flash.

Obviously, then, we music lovers are ready for the improvements in audio performance offered by the Compact Disc, but is the CD system ready for the automobile environment? Can the delicate laser-tracking system, which must function at

Okay, so CD hardware and software can (we hope) survive life in the dashboard—but can the rest of the autosound chain survive CD? To use what has so quickly become an audio cliché, are car stereo electronics and speakers "digital ready"? This concern revolves around the Compact Disc system's ability to reproduce a dynamic range of more than 90 dB. In a car with an ambient noise level of 70 dB, will we therefore have to install amps and speakers capable of reproducing cymbal crashes at a sound pressure level of 160 dB, as some critics of car CD players predict?

Thankfully, no. First, the ear can discriminate desired sounds to about 15 dB below the noise floor, so the masking effect of the noise is effectively lower than the 70-dB "raw" figure would suggest. And second, psychoacoustic studies have shown that the perceived realism of reproduced sound depends more on an adequate dynamic range in the mid and high frequencies than in the low frequencies. An examination of the spectral content of automobile noise shows that it consists chiefly of low

John Bishop, our guest "Autophile" columnist, is car stereo editor of Motor Trend magazine.

CrossTalk

Practical answers to your audio and video questions by Robert Long

Mr. Clean?

My VCR salesman told me to bring back my deck to have it professionally cleaned. I don't know anyone with a VCR who has had this done, but I don't want to ruin my heads. Can you advise me?—Debbie Hoster, Mount Holly, N.J.

Your salesman may have taken you as someone who would prefer to be sure the job is done right, even at a price, than to risk messing up on her own. Or he may have taken you as a sucker—I can't tell which. A number of cleaning devices are available that are easy to use and safe for the deck as long as you follow the directions scrupulously. That's important. If you leave them running too long or use them too frequently, premature head wear is possible. Fortunately, there's seldom (often never) any need to clean the heads in a VCR. When there is, you'll start seeing unusual amounts of video noise (snow, streaks, and so forth).

How High Is Up?

Okay, gents. What I need to know is the real poop on the Nakamichi BX-1 [test report, February 1983]. What kind of record/play response am I going to see at 0 dB or at +5? That's where I record. I know of very few people who set peaks at -20. And what kind of biasing anomaly can I expect with BASF Chromdioxid 2 or Sony UCX-S? Is there going to be a marked sag, and will it be very audible?

Finally, when is the IEC measurement standard for record/play response going to be changed to include test levels of 0 dB (and even +3 or +5)?—J. Fritz Orzelek, Binghamton, N.Y.

Never, I hope, for reasons that your letter demonstrates. When you "set peaks at 0 or +5 dB," only the midrange has much likelihood of reaching the maximum level. What levels will actually be attained in the deep bass and the high treble will depend on the program material, but even the most demanding is unlikely to reach above -20 dB at, say, 10 kHz. Therefore, the standard test level represents a severe but not unrealistic picture of what we can expect to hear from the combination of recorder and tape under test. A test level of 0 dB or higher at frequencies above 5 kHz or so is very unre-

alistic for the vast majority of uses to which recorders—particularly cassette decks—may be put. It does tell us something about the compression (self-erasure) characteristics involved, but it is much too easily misinterpreted as representing the audible frequency response.

Like most current decks whose bias and recording EQ aren't adjustable, the BX-1 is factory set for a ferricobalt (in this case, Nakamichi SX, which is essentially interchangeable with TDK SA) when Type 2 is selected. The BASF (which is a true IEC Type II chromium dioxide tape) prefers somewhat more bias and, for best Dolby tracking, slightly higher recording drive. All other things being equal, this should introduce a lower-treble sag with some peaking at the very top on a deck such as the BX-1. The Sony tape, which we haven't tested, presumably is more similar to the TDK and Nakamichi products.

Whether or not the sag or peak will be audible will depend in part on the program material; whether any audible difference (and I would expect some on music rich in highs) will be a detriment or an improvement will depend partly on your taste. Incidentally, theory dictates that both the sag and the peak will disappear by about the time recording level reaches Dolby reference—some 2 dB below DIN/IEC 0 dB. So if 0-dB response were really important, this mismatch could be ignored altogether.

Not Down the Tube?

I have noticed a growing interest in vacuum-tube amplifiers among my peer audiophiles. Transistor amplifiers are said to be more reliable and more linear in response, but tubes are said to create a warmer and more realistic quality in music. What is the real story? And if tube amplifiers sound better, why are they so rare?—Jeff Hopkins, Fresno, Calif.

There seems to be no resolution in sight to the debate between those who believe that tubes are subtly better (though they often bandy extravagant terms like "vastly better") and those who don't. However, scientifically controlled listening tests have consistently indicated that amplifiers with suitably low noise and distortion (a criterion met by virtually all modern units) sound identical as long as they have the same frequency response and level through the loudspeakers and are not driven beyond their power limits into clipping. (See "The Great

Ego Crunchers—Equalized, Double-Blind Tests," March 1980.) This does not mean that differences never exist—only that they are small, easily explained without recourse to the types of devices doing the amplifying, and just as easily eliminated. On the other hand, there's no doubt about the greater expense of building tube equipment and its much poorer energy efficiency, which argues against the use of tubes both at moderate-to-low prices and at very high power ratings. That doesn't leave much territory, and all of it already is inhabited by successful transistor amps.

Outboard Motor

Manufacturers' ratings notwithstanding, my amplifier's 50 watts per channel barely seems enough for my Ohm I speakers. Does anyone make an outboard power amplifier that, say, produces 200 watts from a 20-watt input?—Travis Jarman, Clearwater, Fla.

DAK offers such a unit, and a cheap, simple pair of homemade voltage dividers (see "Sonic Ambience—The Missing Ingredient," October 1982, for directions) would enable you to achieve the same end with the power amp of your choice. But the best approach is to replace your present amplifier with a more powerful model. A 200-watt (23-dBW) unit should yield 6 dB greater maximum loudness than your 50-watt (17-dBW) amp.

Hard Landing

There appears to be no way of controlling the cueing damping of my Sanyo Plus Q-50 turntable's tonearm. It descends too fast. I ruined a \$50 stylus, and I wrote to Sanyo but received no answer. What can I do?—Gordon Burmeister, New Era, Mich.

The only way out of such a problem, unfortunately, may be the substitution of a more rugged pickup. I know that's cold comfort: Your \$50 stylus assembly implies at least twice that much in the price of the cartridge you will be setting aside. First, however, you should check with your dealer or a Sanyo warranty service facility to make sure that the damping can't be increased.

We regret that the volume of reader mail is too great for us to answer all questions individually.

AUDIOPHILE FILE™ XL-S

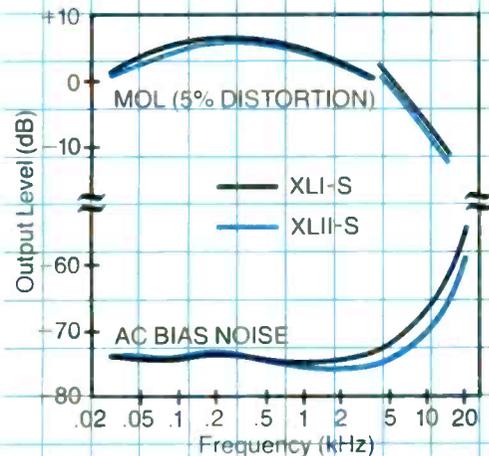
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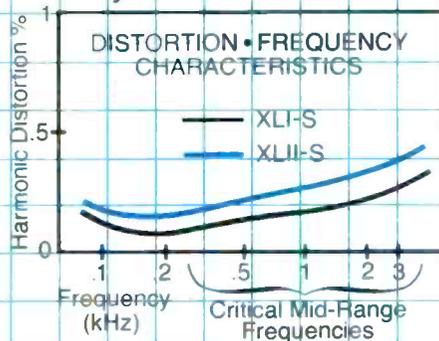


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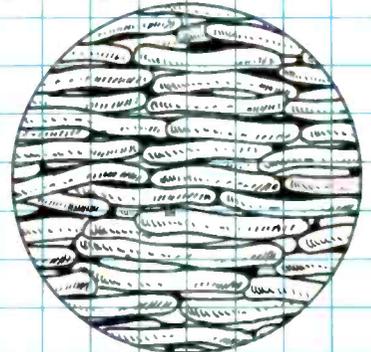
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Retsoff's Remedies

Simple solutions to common system problems by Alexander N. Retsoff

Test Discs For Today's Systems

TEST DISCS can be an invaluable ally in the struggle to keep an audio system operating up to par. You can use them to check for correct phono cartridge alignment and speaker phasing and placement; they also provide a consistent signal source for setting recording levels and establishing proper speaker equalization.

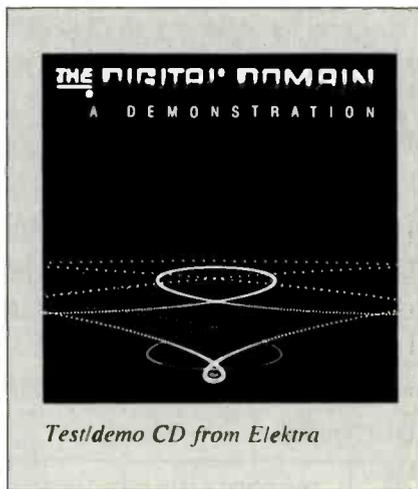
The majority of test discs are, of course, LPs and therefore reflect any anomalies in the phono pickup's response. That's fine—even desirable—if most of your listening is to conventional records, but you may also want a test source independent of the phono cartridge. For that, the Compact Disc is ideal. In most players, a CD's response is ruler flat, presenting your system with a near-perfect source signal.

The first test/demo Compact Disc available in this country is Elektra's "The Digital Domain" (\$19). Created at the Center for Computer Research in Music and Acoustics at Stanford University, it contains both natural and synthetic sounds. You'll find everything from perfect silence (to check the noise floor of your electronics) to the sound of a jet passing directly overhead (to tax your speakers to their utmost). If you have an ounce of sense, heed the producer's warning about volume setting. The contrast in levels between insects chirping in a field and a jet in flight (both on Band 1) is dramatic.

Many of the cuts on the Elektra CD are synthetically derived or computer-doctored, and you may find it difficult to know what they should sound like. But *Hologram* (Band 4) is a "straight" harpsichord recording made with B&K studio microphones, and Bands 6 and 11 bring a racquetball match into your listening room. Band 16 offers a Huey helicopter recorded at Hamilton Air Force Base with B&K high-intensity microphones. The disc's final 7½ minutes contain various test signals: a 1-kHz square wave (1002.273 Hz, for those who insist on digital accuracy), pink noise (first in the left channel, then right, then at various recording levels), and 1-kHz sine waves (recorded at -20, -40, and -60 dB). The test section concludes with a minute of silence.

If you have a ½-octave real-time analyzer, the pink noise provides a very accurate source for checking overall system

response. (More than 30 seconds of it would have been nice.) The final minute of silence enables you to check the noise floor of your system, and the left and right pink noise establishes channel identification and balance. The remaining test signals strike me as somewhat less useful. And be sure to turn the volume way down when listening to the square wave!



Three of the newest analog test discs come from Ortofon, Shure, and Telarc. Ortofon's latest "Pickup Test Record" (No. 003, \$25) is composed entirely of musical excerpts from the Opus 3 label, a small Swedish company. All 11 cuts were made with the Blumlein crossed-microphone technique, which is especially adept at preserving the acoustics of the recording environment.

The selections on Side 1 were chosen to help determine your system's tonal balance, depth of stereo image, and dynamic range. Liner notes tell you what to listen for. The five cuts on Side 2 zero in on various technical parameters: vertical tracking angle, tracking ability, treble distortion, and speaker phasing.

Shure's newest "Audio Obstacle Course" disc (TTR-117, \$15) was introduced with the company's flagship V-15 Type V cartridge. The most intriguing innovation in this test record is the means it provides for establishing what Shure calls a cartridge's TTI, or Total Trackability Index—a figure of merit that describes the maximum recorded levels a pickup can track, as well as the LP wear and tear that such tracking involves. To measure TTI, the disc presents your cartridge with a three-tone test signal that simultaneously exercises it at low, middle, and high frequencies. The relative levels of the three tones (200 Hz, 2.1 kHz, and 17 kHz) are set

to correspond with the levels in these regions on music discs, and the tri-tone signal itself is recorded at six different levels. Any decent cartridge should be able to track the lower levels; the higher ones will prove extremely challenging.

While the TTR-117's main claim to fame is measurement of TTI, it's an excellent cartridge-setup record overall. In addition to strobe bands on the label to establish turntable speed, there are channel identification, balance, and phasing tests. A band at reference level can be useful for setting recording levels on a tape deck, and the final band on the first side helps you adjust antiskating force for your cartridge. Don't be surprised to find the gauge on your tonearm way off. And last, but certainly not least, the final band on Side 2 enables you to check tonearm resonance.

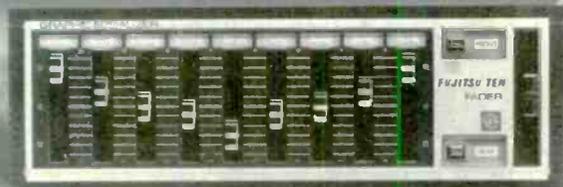
About the most complete audiophile test disc I've come across is the two-record "Omnidisc" set from Telarc (\$30). Its 12-page instruction manual is only a little short of being a minicourse in system setup. In general, the booklet is well written, factual, and reasonably accurate—with one important exception. An LP's outer groove wall contains right-channel information, not left channel. This means that antiskating force should be increased (not decreased) if distortion is heard in the right channel at lower recording levels than in the left.

The Telarc set gives you a lot to work with. Side 1 is a grooveless blank with a set of indices pressed into the vinyl and printed on the label to aid you in setting cartridge overhang and lateral tracking angle. Side 2 is loaded with test signals, and Sides 3 and 4 contain music chosen to tax your system. Telarc's infamous recording of the cannon shots from Tchaikovsky's *1812 Overture* is featured, along with a piano piece for testing transient response, a choral cut for definition, and excerpts from Stravinsky's *The Rite of Spring* and Beethoven's *Fifth Symphony* for low and mid/high tracking ability, respectively. On a lighter note are the fugue for Britten's *The Young Person's Guide to the Orchestra* (with a diagram depicting the layout of the orchestra) and the Beach Boys' *Good Vibrations*, a rock and roll number to check tracking, response, and dynamic range.

Considering the amount you've already invested in your stereo system, it seems well worthwhile to spend a few dollars on one or more of these test records. Get familiar with them and take them with you the next time you shop for new equipment. In a sense, you'll be taking your test lab with you.

HF

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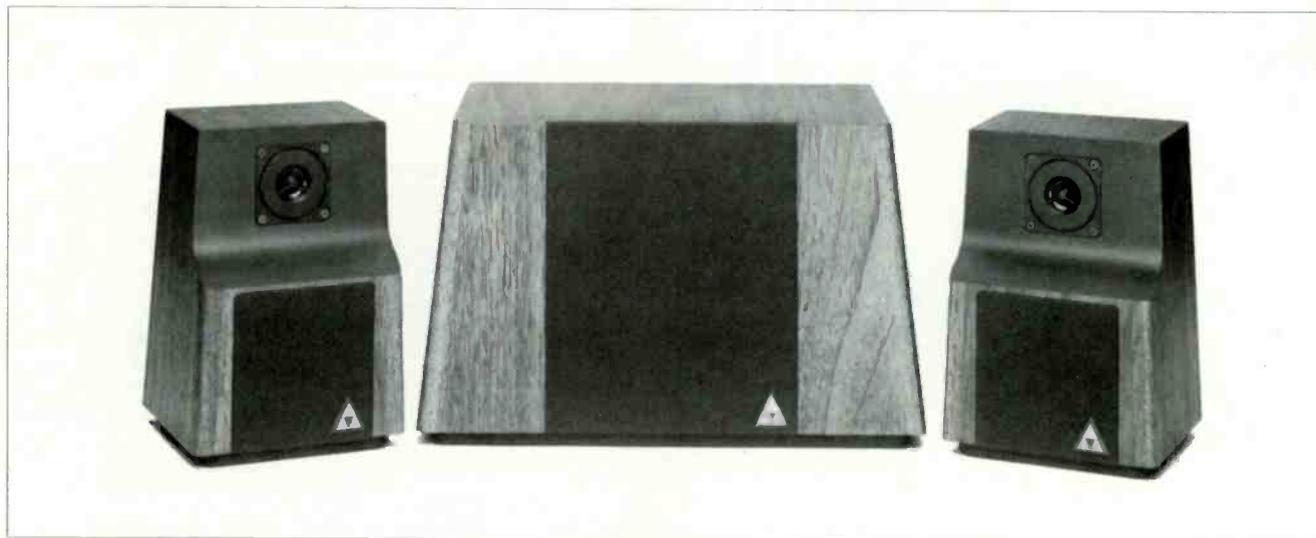
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New Equipment Reports

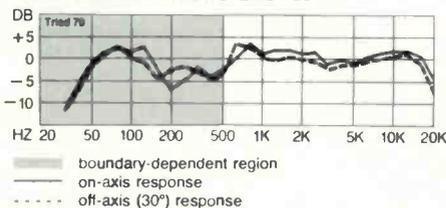
Preparation supervised by Michael Riggs, Peter Dobbin, Robert Long, and Edward J. Foster. Laboratory data (unless otherwise noted) supplied by Diversified Science Laboratories.



A Three-Piece Speaker from Acoustic Design

Triad 70 three-piece stereo loudspeaker system with powered woofer module, in wood enclosures with walnut veneer finish. Dimensions: satellites, 5 $\frac{3}{4}$ by 8 inches (front), 5 inches deep; "subwoofer," 13 $\frac{1}{4}$ by 8 $\frac{1}{4}$ inches (front), 8 inches deep. Price: \$575; optional metal stands, \$90; optional wood stands, \$250. Warranty: "limited," five years parts and labor. Manufacturer: Acoustic Design Group, a division of Aspen Recreational Products, Ltd., P.O. Box G-3, Aspen, Colo. 81612.

ROOM RESPONSE CHARACTERISTICS



SENSITIVITY (at 1 meter; 2.8-volt pink noise, 250 Hz to 6 kHz) 87 $\frac{1}{4}$ dB SPL

AVERAGE IMPEDANCE (250 Hz to 6 kHz) 10 ohms

APPROX. TWEETER CONTROL RANGE (re "flat")
-3 $\frac{1}{2}$, -0 dB above 4 kHz

APPROX. BASS CONTROL RANGE (re "flat")
+6 dB, 50 to 200 Hz

AMONG THE MOST INNOVATIVE new loudspeakers we've seen is the Triad 70 from Acoustic Design Group—a relative newcomer to the field, located in Aspen, Colorado. That this is a subwoofer-cum-satellites system is hardly news, but the bass module in particular is distinctly unlike that of any three-piece system we've tested before. Its built-in power amplifier—whose performance-enhancing secrets Acoustic Design Group declined to share with us on the grounds of pending patent applications—makes this diminutive woofer appear to exceed its own theoretical limits.

The Triad 70 is a recent revamp of the Triad 50, which it resembles very closely. There are two essential differences, however: The 70 has a two-position tweeter level switch in addition to a three-position woofer switch, and the amplifier has been reworked for more power and headroom. Because the manufacturer provided only rather sketchy specifications for the earlier model and no final specs were yet available for the 70 when we tested it, we have had to deduce much of our understanding of its operation from Diversified Science Laboratories' measurements.

The "subwoofer," like most comparable devices, actually delivers all of the bass range and thus might better be

described as a woofer module. It has four pairs of spring-loaded clips on its bottom panel; half are for the power leads from your amplifier, the remainder feed the satellites. The Triad's own amplifier is built into this section (which therefore has its own AC cord). It powers only the bass driver, which reproduces the sum of the two channels.

There is no crossover in the bass unit: It simply hands your amplifier's output unaltered to the satellites, having derived its signal from the voltages as they pass by, so to speak. There is a blocking capacitor at the satellite inputs to keep out the bass frequencies, but the woofer's response rolls off acoustically (without electrical filtering) at the top of its working range. Connections to the satellites are spring clips recessed into the bottom surface.

Two drivers are mounted in each satellite. Behind a nonremovable grille cloth is a midrange cone about three inches across. Above it, and recessed so that (we presume) its voice coil will effectively be in the same plane as that of the lower driver, is a small (perhaps $\frac{3}{4}$ -inch) tweeter protected only by its outer "acoustic lens" structure. The lab's near-field measurements suggest that crossover between these two elements is at about 3 kHz. The midrange driver (whose near-field response appears exceptionally

Report Policy: Equipment reports are based on laboratory measurements and controlled listening tests. Unless otherwise noted, test data and measurements are obtained by Diversified Science Laboratories. The choice of equipment to be tested rests with the editors of HIGH FIDELITY. Samples normally are supplied on loan from the manufacturer. Manufacturers are not permitted to read

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flat between about 150 and 700 Hz) rolls off at a steady 12 dB per octave below the 125-Hz measurement band.

The near-field curve for the bass driver describes a fairly broad parabola with a maximum in the 80-Hz measurement band. On the face of it, this is surprising because the small, sealed enclosure normally would indicate a higher resonance. The manufacturer does give a figure of "about 100 Hz" or "about 105 Hz," but it also says that it has found electronic means of driving the woofer below resonance. We take this to mean that the amplifier includes an equalization circuit to counter the natural rolloff below the resonance frequency. And it definitely has an infrasonic filter to prevent overdrive from warp signals or other ultra-low-frequency information. The company clearly implies that more is involved, but it isn't saying what.

The bass level switch is characterized as ± 4 dB with respect to the "flat" middle position. If the system is used away from the wall, this switch may be at FLAT or +4; against the wall, FLAT or -4 is recommended. Actually, according to DSL's data, it's more complicated than that. Because the bass response tends to peak rather markedly in any of the measurements made by the lab with the middle setting, the implication of simple shelving at +4 or -4 dB is somewhat misleading. With respect to FLAT, the boost position raises response abruptly by about 7 dB just below 250 Hz, maintains this boost down to 80 Hz, and then gradually backs off again. The cut position starts reducing output below 250 Hz, reaches a sharp minimum of about -9 dB in the 100-Hz band, and then gradually pulls back up toward -6 dB with respect to the flat setting.

The action of the tweeter switch is easier to describe. Its two positions provide essentially identical results up to about 2.5 kHz; from there, the curves diverge until, about 5 kHz, there is a steady difference of approximately $3\frac{1}{2}$ dB between the two settings. There is some question, however, concerning which should be considered "flat."

In determining how best to measure the Triad system, DSL tried many combinations of switch positions and placement. It concluded that in its test room and using the Triad metal stands, best overall results were achieved by placing the speakers against the wall and setting the bass at FLAT and the tweeter control at the more attenuated position. The curves and data shown here were all measured with the system set up that way, with the bass unit directly below the satellite being tested.

However, Acoustic Design Group has expressed some preference for free-standing use of the Triad 70 (the Triad 50 was described as a bookshelf system, implying that against-the-wall placement was standard) and conceives the higher-output position of the tweeter switch as the norm.

Using the metal stands, we did most of our listening tests with the speakers well out into the room, which seemed to give better stereo imaging, but we agreed with the lab's choice of switch positions.

Actually, the lab's curves for placement against the wall and free-standing (four feet out into the room) are quite similar except in the bass, where boundary effects have a strong influence. In the on-axis response curve shown here, wall reinforcement brings one octave of the bass to approximately the same level as the entire upper half of the curve; measured out from the wall, bass response never quite attains the levels that characterize the curves from 500 Hz up—even though these curves were made with what the manufacturer considers the attenuating position of the tweeter control.

Our listening experience didn't altogether match the curves in one respect: The bass is not as reticent as they suggest. Indeed, with the bass switch in its boost position, rumble in some broadcasts was intolerable, and even at FLAT, studio air-conditioner noise during announcements was astonishingly apparent. That this much bass energy can be coaxed from so small a box is a subject for wonder; that it is not as clean and musical as that of most bigger speakers (assuming they deliver this much bass, which many don't) is not.

Response toward the top end may also be a little rougher than the curves suggest. We found it not only rather "hot" (our reason for preferring the lower tweeter setting), but relatively unresponsive to attempts at tone-control improvement. The sound also has a certain boxiness (usually attributable to response roughness further down) that we weren't able to eliminate by changing relative driver positions. And though we considered the imaging good, it was not as spectacularly good as the company's stated design objectives had lead us to hope.

Typical of compact systems are the sensitivity and dynamic range. The former, at $87\frac{1}{4}$ dB from the equivalent of 1 watt into 8 ohms, is noticeably lower than average among the speakers we test, though not by enough to be cause for concern. And the manufacturer is the first to point out that such a small system is not ideal for use in big rooms and can be pushed too hard. The Triad did accept the equivalent of more than 21 dBW (125 watts) peak into 8 ohms before exhibiting excessive distortion in the 300-Hz pulse test; at that drive level, it delivered a calculated peak sound pressure level of $108\frac{1}{2}$ dB, which is quite hefty. Distortion figures run from an average of about 1 percent above 100 Hz at 85 dB SPL to more than $2\frac{1}{2}$ percent at 100 dB. At all levels, distortion measures significantly lower above 500 Hz than it does at lower frequencies: At 100 dB, for instance, it averages less than $\frac{3}{4}$ percent in the upper range.

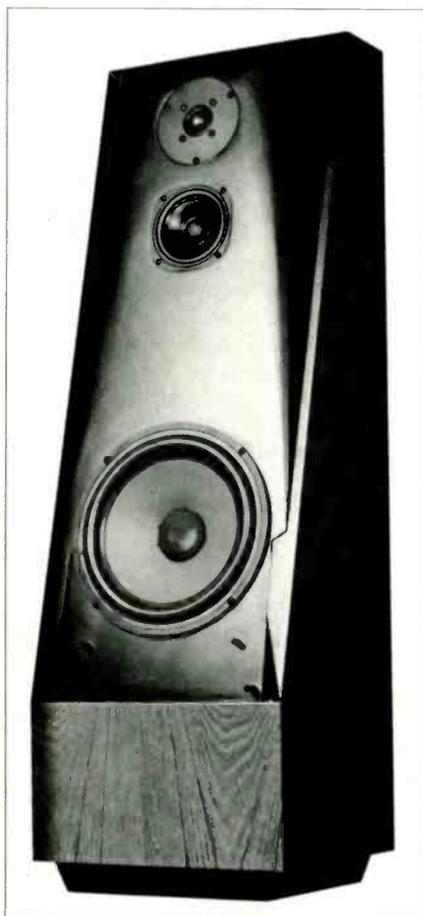
The Triad's impedance is very high in the bass (almost 35 ohms at 20 Hz), as one would expect from the design. It falls in an essentially straight line to the first low of less than 7 ohms near 120 Hz. Following a peak of more than 13 ohms near 170 Hz, it drops to less than 5 ohms in the midrange, then rises to just over 20 ohms near 2.2 kHz. It falls to its minimum value just above 10 kHz—between 3 and 4 ohms, depending on the position of the tweeter switch. The range over which our 10-ohm

average is measured doesn't include this minimum, so with synthesizer rock or other signal sources loaded with highs, paralleled pairs might not prove as safe as the high average implies.

Despite our reservations about some aspects of the Triad 70's performance, we believe Acoustic Design Group is up to something interesting here. And we hope they further develop the ideas the system embodies.

Circle 104 on Reader-Service Card

Thiel's Latest Coherent-Source Speaker



Thiel CS-3 floor-standing loudspeaker system, in particleboard enclosure with teak veneer finish (other finishes available by special order). Dimensions: 13 by 41 inches (front), 13 inches deep. Price: \$750 each. Warranty: "limited," 90 days parts and labor, extended to ten years with return of warranty registration card. Manufacturer: Thiel Audio Products Co., 1042 Nandino Blvd., Lexington, Ky. 40511.

THE CS-3 LOUDSPEAKER is a third-generation version of Thiel's original "Coherent Source" design, the Model 03. (The Model 03A remains in the line at a somewhat lower price.) Its 10-inch woofer, 4-inch midrange driver, and 1-inch dome tweeter are arrayed vertically on the front of a sealed, floor-standing enclosure. The cabinet is finished in lacquered wood veneer on all exposed surfaces and is held a few inches off the floor by an integral stand (also veneered). A gap in the back of the stand gives inconspicuous cable access to bottom-mounted banana-jack binding posts.

If that were the whole story, the CS-3 would be a pretty routine item. The first clue that it isn't comes when you remove its dark-brown cloth grille, revealing a tapered baffle with gently rounded edges. Thiel says this expensive shaping serves to prevent diffraction of high-frequency sound waves at sharp cabinet edges, smoothing the frequency response and clarifying the stereo image.

The baffle also has a slight backward slope that aligns the drivers' acoustic centers in the same vertical plane. This strategy, together with an elaborate first-order (6 dB per octave) crossover network, is said to yield accurate time and phase response (a coherent source, if you will). The audible significance of this refinement is controversial, but Thiel considers it an important contributor to the system's clarity and imaging.

The enclosure itself is made of 1½-inch particleboard—almost twice as thick as that used for most other speakers—to minimize spurious vibration. Unusually high construction quality also is evident in the crossover, which uses air-core coils, polypropylene and polystyrene capacitors, and metal-film resistors for lowest possible distortion. Deep bass response is maintained by an external active equalizer that counters the woofer's natural rolloff in the bottom two octaves.

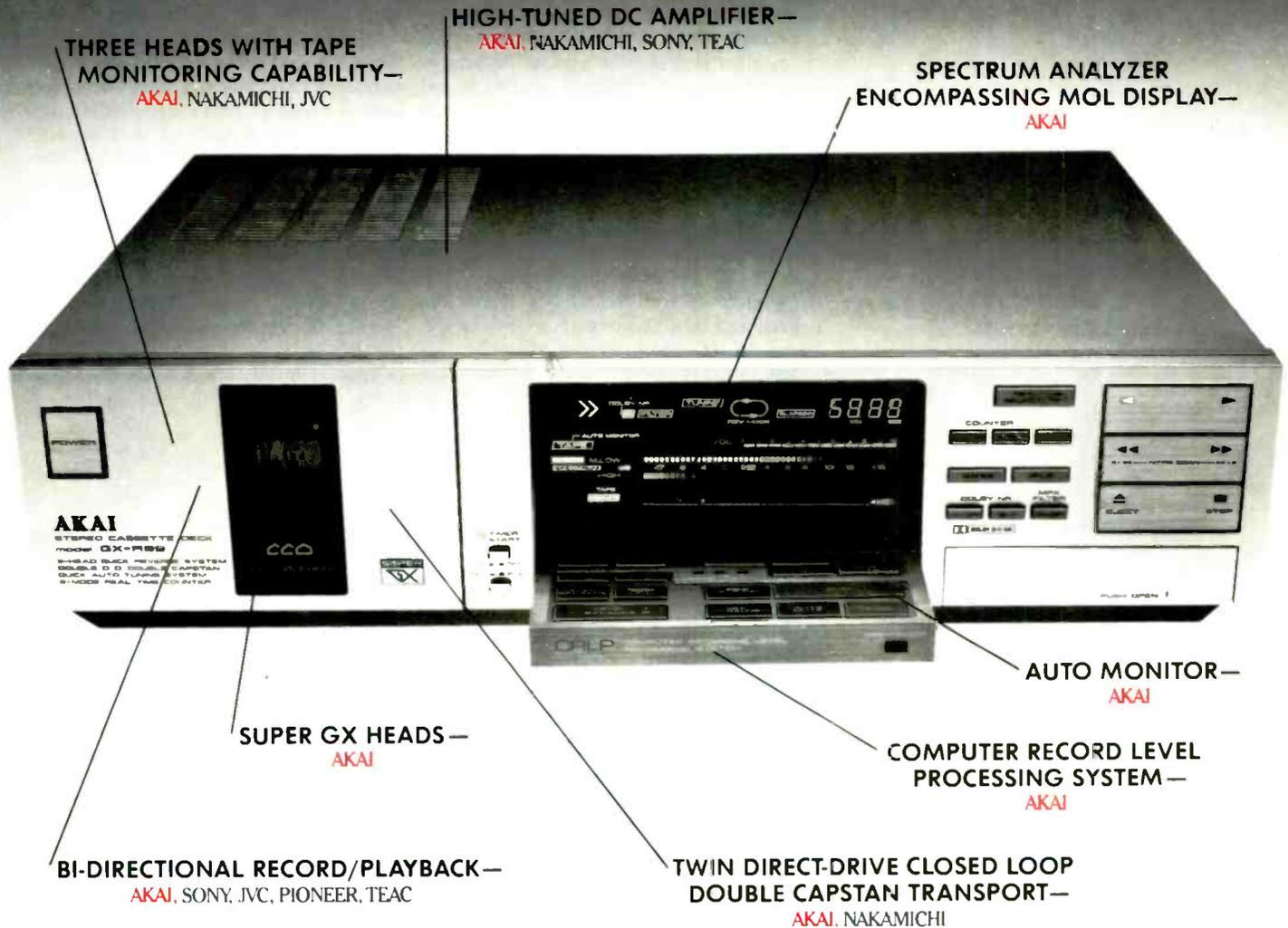
Thiel recommends placing the speakers away from any walls and aimed straight

ahead, at least eight feet in front of the listener. Consequently, Diversified Science Laboratories used the second of its two calibrated measurement positions, four feet in front of the back wall, for all of its tests. (The lab did run an additional set of response curves at the other calibrated position, with the speaker's back against the wall, for reference.)

The CS-3's measured sensitivity is on the high side of average, and its impedance curve is extraordinarily smooth, dropping from a maximum of 12.5 ohms at 20 Hz to about 3.5 ohms at 100 Hz. From there on up, the impedance meanders between a low of 3.3 ohms at approximately 400 Hz to a high of 4.7 ohms at about 3 kHz. The curve's flatness indicates that the speaker is essentially nonreactive (i.e., purely resistive) over almost the entire audible range and therefore easier for an amplifier to drive. Still, the impedance is quite low—especially in the upper bass and lower midrange, where most musical energy is concentrated—which suggests that best results will be obtained with high-current amplifiers. It also means that you should not attempt to run a pair of CS-3s in parallel with another set of speakers.

Power handling is very good, but not exceptional. On the lab's 300-Hz pulse test, the speaker accepted an input of 55 volts peak—equivalent to 25¼ dBW (376 watts) into 8 ohms or 28¼ dBW (750 watts) into 4 ohms—for a calculated peak sound pressure level (SPL) of 115¼ dB at 1 meter before the onset of audible distortion. At a moderately loud 85 dB sound pressure level, harmonic distortion averages approximately 1½ percent over the lab's measurement range (30 Hz to 10 kHz). And from 100 Hz up, it averages a mere ½ percent. Naturally, at higher levels, the distortion increases, so that at 95 dB SPL it averages 3¾ percent over the entire test range and about 1¼ percent from 100 Hz up. These are respectable results, if not outstanding, and the speaker should sound clean at anything short of disco levels. Distortion at very low frequencies rises somewhat faster

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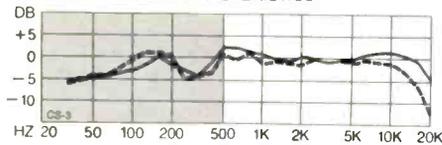
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AUDIO New Equipment Reports

ROOM RESPONSE CHARACTERISTICS



— boundary-dependent region
 — on-axis response
 - - - - - off-axis (30°) response

SENSITIVITY (at 1 meter; 2.8-volt pink noise, 250 Hz to 6 kHz) 90 dB SPL

AVERAGE IMPEDANCE (250 Hz to 6 kHz) 4.1 ohms

than usual, perhaps because of the bass boost applied by the equalizer. According to DSL's measurements, this amounts to about 3 dB of boost at 80 Hz and approximately 12 dB at 25 Hz, below which it falls off rapidly to prevent overload from infrasonic signals.

The CS-3's third-octave response is quite smooth, especially through the mid-range and treble. On axis, it is within $\pm 3\frac{3}{4}$ dB from 40 Hz to 20 kHz. Off axis, response droops a bit in the top octave (above 10 kHz) because of the tweeter's increasing directivity, but no more so than average. And overall, the curve is even smoother here than on axis, maintaining a spread of just $\pm \frac{1}{2}$ dB from 1 to 10 kHz and of ± 4 dB from 40 Hz to 16 kHz. The dip centered on 320 Hz and the peaks around 160 and 640 Hz probably are caused by interference effects from reflections off the floor.

In the curves shown here, the bass response tapers down about 5 dB from 125 to 25 Hz before dropping sharply. The curves taken with the speaker against the back wall show a response rise between 125 and 40 Hz, which indicates that the bass loss in the published curves is simply the result of inadequate boundary reinforcement

at the measurement position. Placing the speakers between the two distances DSL used might actually give the best performance.

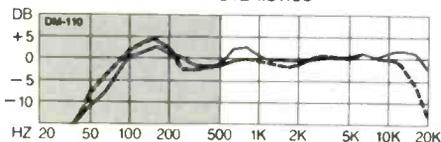
We tried all three in our listening room and found ourselves preferring the wall and midway-out placements (the latter especially, just as we would have expected from the measurements). But none of them left us with any cause for serious complaint: The CS-3 is simply a superb-sounding loudspeaker with a remarkably natural tonal balance. Vocal reproduction, which is one of its most notable strengths; brass and strings sound clear without shading into stridency. And imaging is excellent, combining openness with precise localization. Most welcome is the absence of any artificial forwardness, which makes some otherwise good loudspeakers sound slightly vulgar by comparison to the Thiel's polite refinement.

If we seem enthusiastic, it's because we are. The Thiel CS-3 has become a favorite here—well enough liked to be deemed worth its not inconsiderable price. We heartily recommend that anyone looking for a speaker in this bracket give the CS-3 a long, serious listen.

Mannerly Musicality In B&W's Baby

B&W DM-110 loudspeaker system, in particleboard enclosure with simulated walnut or black-ash finish. Dimensions: 10 $\frac{1}{4}$ by 19 inches (front), 10 inches deep. Price: \$300 per pair. Warranty: "limited," five years parts and labor. Manufacturer: B&W Loudspeakers, Ltd., England; U.S. distributor: Anglo American Audio Co., Inc., P.O. Box 653, Buffalo, N.Y. 14240.

ROOM RESPONSE CHARACTERISTICS



— boundary-dependent region
 — on-axis response
 - - - - - off-axis (30°) response

SENSITIVITY (at 1 meter; 2.8-volt pink noise, 250 Hz to 6 kHz) 91 dB SPL

AVERAGE IMPEDANCE (250 Hz to 6 kHz) 12 $\frac{1}{2}$ ohms

LIKE OTHER PROMINENT exponents of computer-aided loudspeaker design, B&W began by seeing how perfect a speaker it could build, price no object, using the new technology. But digital recording and the Compact Disc—with their potential for superaccurate frequency response, dynamics, and transient reproduction—have accentuated the importance of these digital design tools for wringing maximum performance from every product. So B&W has now turned its full technical resources to the task of making loudspeakers for which price very definitely is a consideration.

The DM-110, reviewed here, and DM-220 are the resulting members of the company's Digital Monitor Series. The essential difference between the two models is in how they handle the low frequencies. The 220 fits two woofers into a sealed enclosure for maximum power-handling capacity and deep-bass response; the 110's single woofer is mounted in a smaller, ported enclosure for maximum cost effectiveness. The woofers themselves are 8-inch cones, crossed over at 3 kHz to a 1-inch dome tweeter. Connections are made at color-coded binding posts that accept banana plugs. The binding posts are in a back-panel recess with angled sides that make visibility of the holes for bare-wire leads marginally better than average, and in all

but one of the eight we examined, the hole was oriented vertically—a further aid in what can be an awkward hookup process.

The design speaks clearly of care in manufacturing. Loudspeakers today make a much more elegant impression than their forebears when you remove the grille, and the undraped appearance of the DM-110s is well above average even by current standards. Our test samples sported the simulated black-ash finish—a welcome antidote to the ever-present walnut, which also is available. (As usual in today's vinyl finishes, this one is virtually a dead ringer for real wood grain, despite the unusual color.) The baffle-panel paint and grille fabric complement the cabinet colors.

B&W's advice for room placement is unexceptionable, if a little vague. The owner's manual recommends asymmetrical positioning between the two side walls—a good point that's often overlooked—and advises that the speakers be free-standing rather than wall-mounted or, worse, corner-mounted. Diversified Science Laboratories made its measurements with the speaker on a 12-inch stand and four feet in front of the wall; for listening, we kept the speakers a little higher and even farther out from the back wall.

The lab's on-axis response curve is remarkably flat throughout the working

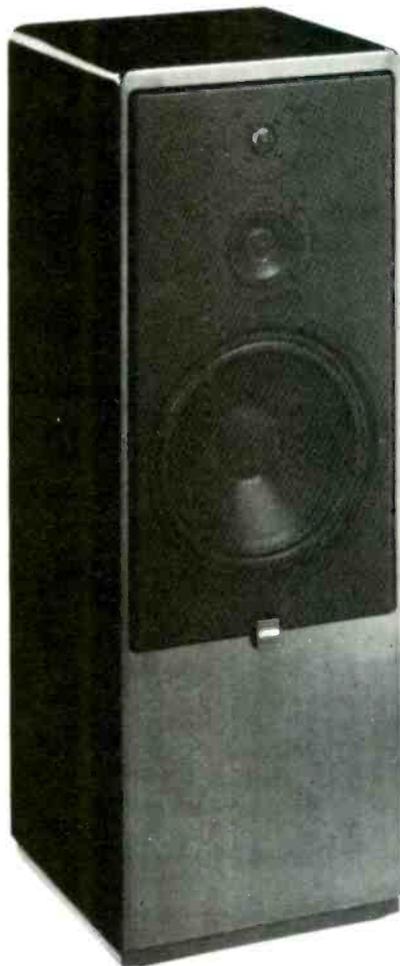
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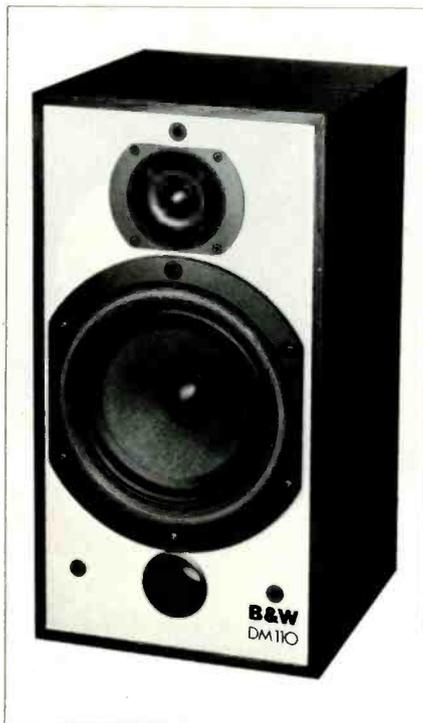
Dimensions (WxHxD):

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range. With the exception of two mild prominences centered in the 160- and 800-Hz bands, barely reaching $+2\frac{1}{2}$ dB, response is within ± 2 dB from the 100-Hz band to that just below 20 kHz. Near-field measurements show that the woofer itself rolls off below 80 Hz, while the vent reaches maximum output at 50 Hz. The off-axis response, which would seem very good were not the on-axis curve so superior, shows more rise around 160 Hz and rolls off a bit earlier at the top, but is otherwise within ± 3 dB over the same frequency range.

Sensitivity is (as B&W claims) higher than you might expect in a system this small. At 91 dB, it's fairly typical of the speakers of all sizes we test these days, though some models—even large ones—come in several dB lower. The average impedance ($12\frac{1}{2}$ ohms in our standard test band) is higher than usual. The impedance curve ripples between highs of just over 20 ohms (at about 23, 83, and 950 Hz) and lows of $5\frac{1}{2}$ ohms or more (at about 43, 200, and 3,000 Hz). Paralleled pairs shouldn't overtax any well-designed amplifier.

Distortion is quite low and increases relatively slowly as drive level is boosted. In all of DSL's tests, harmonic distortion is even lower at high frequencies than it is in the midrange, but the averages for all frequencies above 100 Hz run from about $\frac{1}{4}$ percent at a sound pressure level (SPL) of 85 dB to about $\frac{3}{4}$ percent at 100 dB (the lab's highest test level). In the 300-Hz pulse test, a change in sound coloration and observable waveshape, establishing the upper limit of the speaker's useful dynamic range, occurred at a calculated $116\frac{1}{4}$ dB

SPL (from a peak input of 55 volts—the equivalent of $25\frac{1}{4}$ dBW, or 375 watts, into 8 ohms), which is more than loud enough for any home reproduction purpose we can imagine.

We are very pleased indeed with the sound of the DM-110. It is smooth and accurate to the point of being self-effacing. Our only complaint, and it's a minor one, is that stereo imaging is not particularly vivid. The "sound stage" seems somewhat narrow, and instrumental placements within it a bit vague. We suspect that this may be caused, at least in part, by the speaker's somewhat broken-up baffle surface and the heavy grille frame that fits against it. When so much attention is being paid to removing sources of sonic reflection and diffraction in the baffle areas of current speakers—including B&W's own premium products—this element of the design is a little disappointing. In any event, however, the imaging is acceptable.

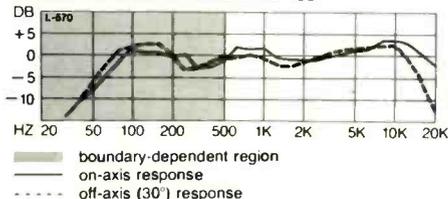
If you're used to the sort of exaggeration that once was commonplace, you may think the DM-110's sound understated at first hearing. But that would be at least partially attributable to its very low coloration. As in virtually any small speaker, response is not strong in the deep bass, but neither is it thumpy and toneless—as it can be in ported systems less carefully designed than this one. The sound is thus more musically accurate than sonically spectacular. And it's surprising that so beautifully crafted a speaker can be imported from an ocean away and still sell for so reasonable a price.

Circle 101 on Reader-Service Card

ADS's Atelier- Compatible Loudspeaker

ADS L-570 loudspeaker system, in particleboard enclosure with wood-grain or flat vinyl finish. Dimensions: $11\frac{3}{4}$ by 19 inches (front), 10 inches deep plus 1-inch clearance for grille. Price: \$220 each in simulated walnut, \$200 in flat black; optional F-5/B floor stands, \$25 each. Warranty: "limited," five years parts and labor. Manufacturer: Analog & Digital Systems, Inc., One Progress Way, Wilmington, Mass. 01887.

ROOM RESPONSE CHARACTERISTICS



BY NOW WELL KNOWN as a loudspeaker manufacturer, ADS recently added electronics: the Atelier series, actually manufactured by Braun in West Germany and (surprise!) bearing a distinctly Continental look. The L-570 speaker is (like the smaller L-470) a two-way system designed as, among other things, a suitable match for the Ateliers. The beveled edges do suggest their profile, and the perforated steel grille reflects not only European styling, but also that of ADS's landmark minispeakers. Of course, the L-570 can be used with other component brands as well.

The woofer is an 8-inch cone that is formed with a tapered cross section, held in a butyl rubber surround, and mounted in a sealed (acoustic suspension) enclosure. It crosses over at 1.8 kHz to a 1-inch soft-dome tweeter. The two drivers are aligned vertically on a simple, uncluttered baffle. Because the steel grille is self-supporting, it requires no frame and is presumably about

as acoustically transparent as possible. In a recess on the back panel are spring-loaded connectors that accept banana plugs as well as bare wires. The overall appearance is fairly handsome, though we consider the "wood grain" vinyl less convincingly naturalistic than average. (We didn't examine the alternative matte-black vinyl finish.)

ADS recommends keeping the speakers at least ten inches off the floor and (despite the "bookshelf" designation, which specifies size rather than preferred placement) at least two feet from other room boundaries. Diversified Science Laboratories made its measurements with the speaker mounted on a 12-inch stand four feet away from the wall, and we positioned the L-570s similarly for our listening tests.

The on-axis curve is quite smooth, with relatively minor departures from flat response. Among these is a dip in the lower midrange (around 350 Hz) of about $2\frac{1}{2}$ dB below the curve's average level—probably

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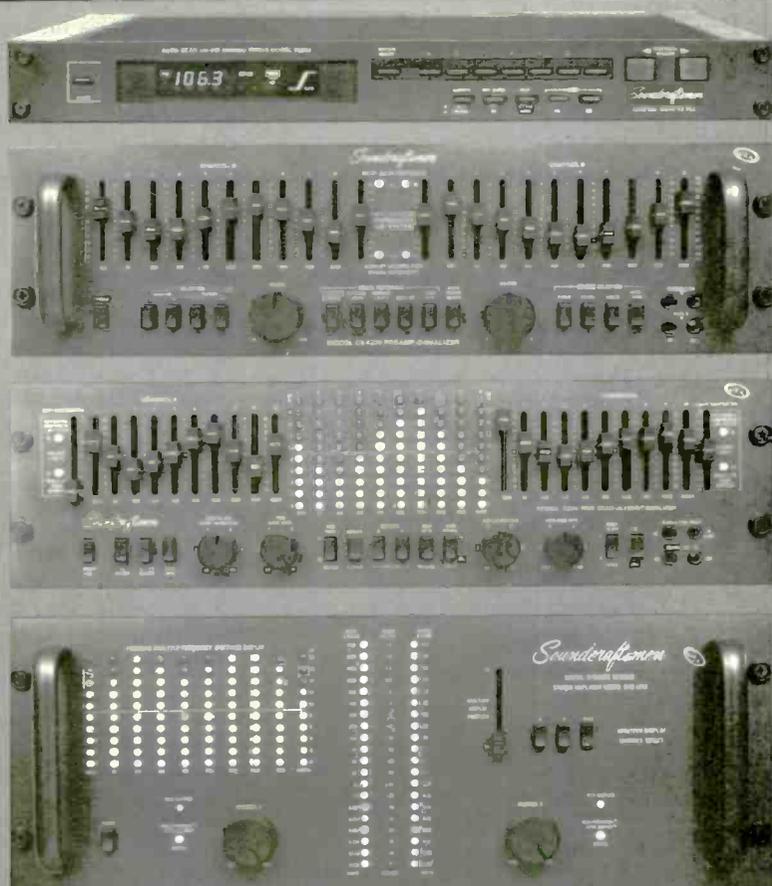
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AUDIO New Equipment Reports

SENSITIVITY (at 1 meter; 2.8-volt pink noise, 250 Hz to 6 kHz) 88¼ dB SPL

AVERAGE IMPEDANCE (250 Hz to 6 kHz) 12½ ohms



caused by interference from a floor reflection. The largest is a prominence of about 3¼ dB centered just below 10 kHz. Otherwise, the on-axis response falls mainly within a ± 2 -dB window from 80 Hz up, including a shallow trough approximately 1 dB deep between 1.2 and 3 kHz. The off-axis response is a good match and stays within ± 3 dB (even including dips and peaks) from the 63-Hz band to that centered on 12.5 kHz.

The curves suggest some emphasis of the upper treble, but they didn't fully prepare us for the bright liveliness of the sound, which you may view as either super-detailed or rather aggressive, depending on your taste. The speaker's brightness emphasizes hiss in FM broadcasts and tape playback, and during the listening tests we preferred to roll off the top end slightly at our preamp's treble control.

Distortion averages about ¼ percent from 100 Hz up at the lowest test level (85 dB SPL), though it runs close to ¼ percent—attributable almost exclusively to the relatively benign second harmonic—from 200 through 400 Hz. At 90 dB SPL, overall distortion is not much higher, though the second harmonic jumps to approximately 1 percent in the 200- to 400-Hz octave and is slightly higher at 10 kHz (the highest frequency used for these tests). At 95 dB, the second harmonic runs about 2 percent between 200 and 400 Hz and at 10 kHz, while distortion averages about ½ percent elsewhere. At the highest test level (100

dB), these figures increase to more than 3 percent and near ¾ percent, respectively, though signs of distress at 6.3 kHz induced the lab to discontinue the test there and at 10 kHz.

Performance in the 300-Hz pulse test was exemplary. The L-570 accepted with no trouble the full output of the lab's amp—the equivalent of 27¼ dBW, or 530 watts, peak input to 8 ohms—for a calculated sound pressure level of 115½ dB. Sensitivity, at 88¼ dB, is to the low end of average among the speakers we test, at least partly because of the L-570's relatively high impedance.

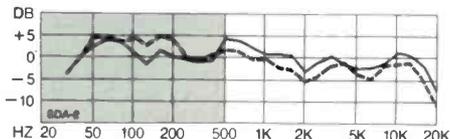
The impedance curve descends to broad minima of just over 5 ohms, punctuated by narrow peaks of 14.9 ohms at bass resonance (60 Hz) and 23.9 ohms in the crossover region. The measured average of 12½ ohms documents (and perhaps even overstates) the fact that paralleled pairs should pose no threat to competently designed amplifiers.

This leaves what may be the L-570's most amiable property: its imaging. We found it broad and detailed, yielding a specific picture of instrumental placements in, for example, Schubert's Octet for Strings and Winds, in F (Nonesuch Compact Disc 9-79046-2). The speaker's vivid bite on the attacks helps create a special immediacy in such music—though, as we say, you can tame it into a more laid-back sonic persona by a slight treble reduction if you prefer. **Circle 103 on Reader-Service Card**

Super Stereo From Polk Audio

Polk SDA-2 Stereo Dimensional Array floor-standing loudspeaker system, in particleboard enclosures with walnut or rosewood finish. Dimensions: 16 by 39¼ inches (front), 11¾ inches deep plus clearance for connections. Price: \$1,200 per stereo pair. Warranty: "limited," five years parts and labor. Manufacturer: Polk Audio, Inc., 1915 Annapolis Rd., Baltimore, Md. 21230.

ROOM RESPONSE CHARACTERISTICS



— boundary-dependent region
 — on-axis response*
 - - - - off-axis (30°) response*

SENSITIVITY (at 1 meter; 2.8-volt pink noise, 250 Hz to 6 kHz) 91 dB SPL*

AVERAGE IMPEDANCE (250 Hz to 6 kHz)
 one channel driven 3.3 ohms*
 both channels driven (mono) 9.2 ohms*

*See text.

WHEN WE REVIEWED Polk's first Stereo Dimensional Array system (the SDA-1, January 1983), we commented on what an exciting and interesting loudspeaker it was to listen to. Although by no means a flawless reproducer, it was capable of some extraordinary feats of stereo imaging. It was also quite expensive, so designer Matt Polk set out to make a less costly version without giving up too much in sound quality. He succeeded so well that the SDA-2 system not only sells for \$500 less, but it actually sounds *better* than the original SDA-1. Naturally, that sent him back to work on the top model, giving rise to the SDA-1A, but that's a story for another time.

With its grille on, the SDA-2 looks exactly like the SDA-1, only a little smaller. Removing the grille reveals that the woofer complement has been reduced from two 6½-inch cones to one, augmented by a large passive radiator. The woofer operates from 125 Hz down. Directly above it is an identical 6½-inch midwoofer that works from 2.5 kHz down, including the range

covered by the woofer. It also is loaded by the passive radiator—another difference from the SDA-1, in which the midwoofer was mounted in a vented subenclosure, isolated from the other drivers and the passive radiator. On top is a soft-dome tweeter slightly more than 1 inch in diameter.

Right next to the tweeter and midwoofer, toward the baffle's outside edge, is an identical pair of drivers, also with a 2.5-kHz crossover. But they do not reproduce the same signal. These drivers are fed the *difference* between the left- and right-channel signals: left minus right (L-R) to the left speaker's outer "dimensional array," right minus left (R-L) to the right speaker's. This is achieved by means of matrix circuits in the crossover networks and a cable that connects the two speakers in a stereo pair together. The three drivers forming the inner "stereo array" get straight left- and right-channel signals, just as in an ordinary pair of loudspeakers.

The point of all this fancy footwork is to fool your ears into thinking they're hearing a real, live sonic event, rather than a



pair of speakers trying to fake you out with a stereophonic illusion. That is, the SDAs try to create a more convincing illusion than is possible with ordinary stereo. The output from the dimensional arrays (which are separated from the stereo drivers by about the width of a human head) serves mainly to cancel false localization cues that normally would arise from each ear hearing the outputs of both speakers in a conventional stereo pair. With the SDAs, the left ear hears the left speaker and the right ear hears the right speaker. (For a more complete explanation of how the SDA systems work, see our review of the SDA-1.) This is similar in principle to what electronic devices such as the Carver Sonic Hologram Generator and (especially) the Sound Concepts IR-2100 Image-Restoration system seek to achieve.

Because of the SDA-2's unusual design, Diversified Science Laboratories found it difficult to obtain unambiguous test results. The lab ran a total of 42 third-octave response curves, with the speakers in various positions and configurations (both together, or one in the room and one out with its output muffled by blankets) and with several types of input (mono, left only, and right only). The curves shown here were made with both speakers standing together against the back wall and a mono pink noise signal. (Thus, they are directly comparable to the curves we printed for the SDA-1.) These are neither the best nor the worst of the curves, but they are fairly representative of the lot. We were gratified, however, to see that all of the curves DSL obtained from the SDA-2 are smoother than those for the original SDA-1 and that they are significantly more consistent with one another. The latter point, in particular, makes us much more confident of the validity of the measurements.

Impedance measurements also posed something of a problem, because the SDA-2's impedance varies according to how "stereo" the drive signal is. A mono signal, which exercises only the inner arrays, gives a very smooth, flat curve, with a maximum of 13 ohms at 50 Hz, a minimum of 6.1 ohms at 110 Hz, and an average of slightly more than 9 ohms. Driving the left or right channel only brings the dimensional arrays into full play, dropping the maximum impedance to 7.2 ohms, the minimum to 3.0 ohms, and the average to between 3 and 4 ohms. With typical program material, the impedance would vary continuously between these extremes.

Regardless of drive condition, the impedance is notably constant with respect to frequency above about 100 Hz, indicating that the system constitutes an essentially nonreactive load—i.e., one that is almost purely resistive, with only minor capacitive or inductive elements. This is beneficial in that it makes the system easier for an amplifier to drive, and we would not expect any problems in this regard using good, modern

equipment. However, the impedance can be very low under some circumstances, so we would not advise running another pair of speakers in parallel with the Polks.

DSL measured sensitivity, power handling, and distortion very conservatively—using a mono drive signal with one speaker in the room against the back wall and the other in another room, muffled with blankets. The sensitivity nonetheless proved fairly high, which means that it's probably even a little higher under more typical conditions of use. And in the 300-Hz pulse test, the SDA-2 accepted the full output of the lab's amplifiers—63 volts peak, equivalent to 27 dBW, or 500 watts, into 8 ohms, for a calculated peak sound pressure level of 118 dB. Plenty loud enough for anyone, we'd say.

Harmonic distortion is quite low, averaging about 1/4 percent from 100 Hz to 10 kHz at a moderately loud 85 dB sound pressure level (SPL). Another 10 dB is required to get the distortion up over 1/2 percent, and it doesn't really begin to take off until a very loud 100 dB SPL is reached, generating approximately 1 1/4 percent distortion.

Polk says that the speakers should be placed at least several feet away from side walls, but otherwise recommends experimentation. We found them quite satisfactory (and not much different) both against the back wall and out in the room, though we used the latter position for most of our listening. What struck us first were the obvious improvements over the original SDA-1. There is no evidence of stridency, for example. Indeed, the balance of the SDA-2 is exceptionally smooth and natural with, if anything, a slight tendency to warmth. Nor have we noticed any of the odd echoey effects that cropped up with some recordings played over the old SDA-1.

What does remain unchanged (or nearly so) is the remarkable stereo imaging that set the first SDAs apart from the crowd. Everything sounds a little more solid and "there" on the SDA-2s than it does on conventional speakers. They also have the ability to place sounds out to the left or right, beyond the confines of the space between the speakers—an amazing experience, and quite startling the first few times you realize it's happening. The new model seems somewhat less disposed to spectacular, surreal effects than the original was, but this mainly tends to make it sound more realistic and less gimmicky. And the degree to which it sounds different from other speakers depends to some extent on the characteristics of the recording being played, though we have yet to hear any stereo program that doesn't benefit at least a little from Polk's novel design.

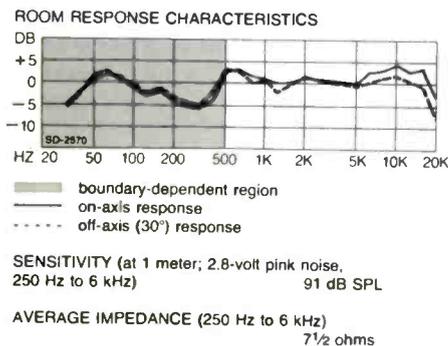
In short, these are very fine and utterly fascinating loudspeakers. Even if you know you'll never be able to afford them, you owe it to yourself to audition them, just to hear what they can do.

Circle 35 on Reader-Service Card

Magnavox's Deluxe Loudspeaker



Magnavox SD-2570 loudspeaker system, in particleboard enclosure with walnut veneer finish. Dimensions: 14½ by 41 inches (front), 13½ inches deep. Price: \$800 per pair. Warranty: "limited," 12 months parts, three months labor. Manufacturer: Magnavox/N.A.P. Consumer Electronics Corp., P.O. Box 6950, Knoxville, Tenn. 37914.



NOT SO LONG AGO, audiophiles looked on Magnavox as "one of them"—a sort of enemy because of the company's "brown goods" line of stereo consoles. That was before it was acquired by North American Philips, which, among other things, has drawn it into the vortex of the Compact Disc revolution. The Magnavox image thus has changed, over the last couple of years especially, and so have its products and the people to whom they are sold.

The SD-2570 is one of two floor-standing three-way loudspeakers whose black grilles cover most of the front, while walnut veneer covers the exposed surfaces of the front and sides. (The other model, the 9300, has a black baffle panel behind the grille, while the 2570 continues the walnut veneer right up behind the drivers' mounting flanges.) The back surface is painted black; spring-loaded clips in a recess about halfway up this surface accept bared wire leads from the amplifier. Also on the back panel, near the floor, is the mouth of the ducted port that loads the woofer. For correct operation, this port must be kept away from the wall so that it can "breathe," though the unveneered back argues against free-standing placement well out in the room.

Diversified Science Laboratories' near-field response measurements indicate that maximum vent output occurs at about 25 Hz, with the 12-inch woofer delivering its maximum direct output near 80 Hz. Crossover to a 2-inch midrange dome is at about 500 Hz; it, in turn, hands the signal over to a 1-inch dome tweeter at about 3 kHz. The woofer is centered on the front panel; the two domes, though aligned vertically, are offset by approximately 1½ inches from the woofer's vertical axis.

The lab tested the SD-2570 standing eight inches in front of the back wall—a position for which we have room correction data and one that is substantially the same as the 12-inch distance Magnavox recommends. (The exact dimension normally won't be critical in this kind of system as long as the vent has enough space to work.) DSL also measured third-octave response with the speaker standing four feet out in the room, with quite similar results except for somewhat less acoustic output in the deep bass.

The response is not as smooth as we might have liked, and we found tone controls of only moderate help except in compensating for the deep-bass loss in the free-standing position. In the primary measurement position (against the back wall), on-axis response is within about ±4¼ dB from below 40 Hz up, with the exception of a trough centered near 300 Hz, where measured response drops beyond -5 dB. (This probably is caused by interference from a reflection off the floor.) From 500 Hz up, however, the curve stays consistently above the 0-dB average until the very top of the audible range and exceeds +2 dB in a broad

peak above 5 kHz. Together, these factors give the sound a somewhat colored quality, with a certain edginess that's difficult to banish from string tone.

This may be abetted marginally by a marked increase in third harmonic distortion around 300 Hz. At sound pressure levels of 85 and 90 dB, for instance, distortion over the range above 80 Hz averages about ¼ percent, which is very good; but the third harmonic is about 1 percent at 250 and 320 Hz at the lower test level and about 1¼ percent at the higher one. Elevating the test level still further raises the distortion both in this limited range and across the board; at 100 dB SPL it reaches about ½ percent overall (which is excellent) and around 1¼ percent in the 300-Hz band (not too bad except by comparison to the fine overall figures).

Through most of the frequency range, the impedance is very well controlled. The port introduces a peak of more than 30 ohms into the infrasonic region of the curve, and another of just over 53 ohms occurs at about 47 Hz. A broader and milder rise (to 14 ohms) is centered just below 300 Hz. Otherwise, the curve stays mainly between 6 and 8 ohms, as reflected in the 7½-ohm average in our data. If you want to parallel pairs of SD-2570s (or, more likely, one pair of the Magnavoxes with a pair having a similar impedance rating), you need not fear for your amplifier.

Sensitivity, at 91 dB, is on the high side of average—though not as high as you might guess from the speaker's size and ported design. In the 300-Hz pulse test (where the SD-2570's impedance is fairly high), it accepted without complaint the full brunt of the test amplifier—the equivalent of 28 dBW (630 watts) into 8 ohms—for a calculated peak sound pressure level of 119 dB. Magnavox rates the design at 100 watts power-handling capacity, and it appears capable of accommodating considerably more than that on musical material and therefore of reproducing a greater dynamic range than home listeners normally will need.

We aren't as impressed with the stereo imaging, which would have passed muster a few years ago but seems rather shallow and vague by today's standards. Magnavox's failure either to align the drivers vertically or to provide symmetrical arrays in its stereo pair (both fairly commonplace techniques nowadays) may be part of the reason.

Still, the speakers make an imposing appearance and, sonically, represent a huge step into true high fidelity for a company once snubbed by audiophiles. The new Magnavox demands to be taken seriously as a manufacturer of high-quality audio equipment, and we find we can take the company at its word in this respect even if we have some reservations about this particular product.

Circle 102 on Reader-Service Card

HEAR ALL OF THE MUSIC AND NONE OF THE TAPE



SWITCH TO BASF CHROME AUDIO TAPE



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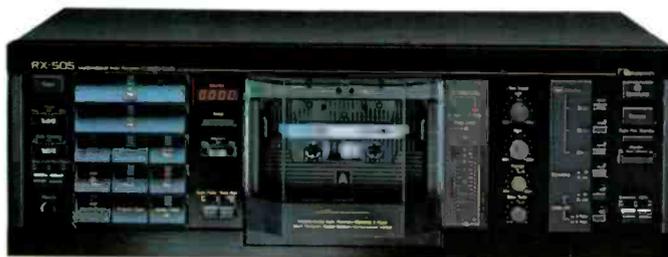
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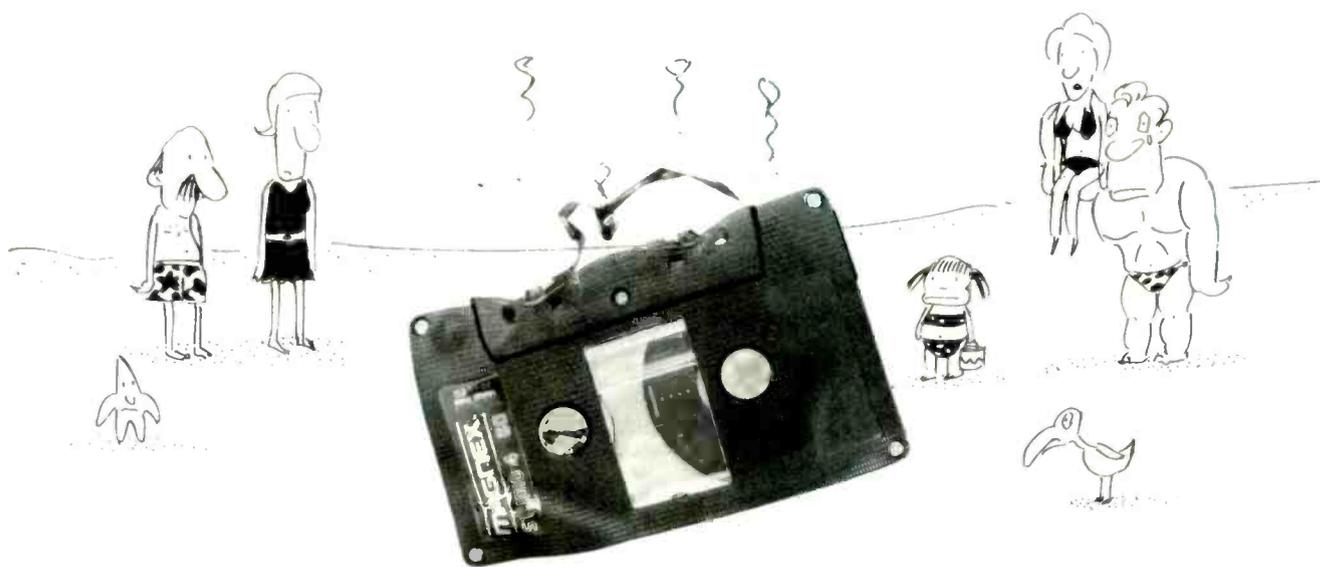
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A COMPLETE GUIDE TO summertime taping



BY

ROBERT LONG



Tips on making traveling tapes, and how to rescue your damaged recordings

AMONG THE UNIQUE JOYS of the audio cassette is its portability. It's the musical medium of choice just about anywhere that's out of AC-cord range. (Radio once enjoyed the honor, but it has a harder time delivering a clean signal under many conditions and usually is plagued by commercials.) Basic to your enjoyment of cassettes outdoors or in the car, however, is the acknowledgement that once a tape

leaves the listening room, it faces a totally different (and sometimes quite threatening) environment.

At home, it's relatively easy to store cassettes in the consistently moderate temperature and humidity that they prefer, and away from the dust and grime that they abhor. By contrast, car interiors run the gamut in temperature from sub-zero to meltdown (literally, from the cassette's viewpoint), and vary in humidity from desert-dry to dew point. And even the flotsam that infests the floors of most cars is nothing compared to the abrasive grit of beach sand.

So the first decision you must

make about your tapes is their degree of disposability (or, conversely, of archivability). You can leave all your taped treasures at home and take only copies into the wild, or you can limit your portable listening to just a few carefully chosen and even more carefully protected cassettes. A caddy will help keep out the grime (be sure to buy one that accommodates the cassettes with their original protective boxes) and will enable you to carry your collection with you instead of leaving it to the untender atmospheric mercies of a parked car.

Remember that foreign matter can harm the deck as well as the tape. So

unless you can afford to treat your hardware as disposable, it's a good idea to toss out a contaminated cassette and redo the recording with a fresh one. Damaged tapes often can be restored (see "How to Repair Your Cassettes," page 40), but once gummy or gritty substances have gotten into the shell, the tape should be treated as a permanent security risk.

Though the likelihood of damage is reason enough to create a separate (and ultimately disposable) library of cassettes for portable use, the playback characteristics of most battery-powered and car decks also support the idea. To be blunt about it, the playback response of these decks, particularly in the highs, is not in a class with that of good home recorders. Add to this the limitations of small speakers and headphones (though both have made considerable strides in the last few years), the vagaries of in-car or alfresco acoustics, and the ambient noise that's likely to accompany portable listening, and you're no longer dealing with the highest of hi-fi environments.

This gives you license to adopt some techniques in making portable recordings that I couldn't recommend in good conscience for home-use cassettes (which should be as "flat" and therefore as close to objective perfection as possible). Many of these compensatory techniques require a certain amount of cut-and-try; all

depend on a serendipitous relationship between your tape, your player, and your listening environment. So don't be surprised if some of them fail to work for you.

ADJUSTING EQ AND BIAS

The most obvious approach is to pre-equalize your tapes to compensate for playback losses. Because you have no convenient way of measuring those losses, you must start by guessing—perhaps by adding a 6-dB boost at 10 kHz with an equalizer inserted between the music source and the recorder. You won't know whether this is too little, too much, or just about right until you actually play the cassettes in your portable or car deck. On the basis of what you hear, you can fine-tune your technique for future dubbing.

There are cheaper (but less flexible) ways of getting similar results, however. The best known is to record with appropriate equalization on tapes in the Type 2, 3, or 4 groups (chrome/ferricobalt, ferrichrome, and metal, respectively) and then use the "normal" Type 1 EQ for playback in the car (120 microseconds, instead of the 70 microseconds that is standard for the other three types). The difference between the two EQ curves will effectively boost the whole top end of the response.

Bias—the ultrasonic signal necessary for low-distortion audio recording—can be altered instead of

equalization. When bias and recording EQ are in perfect balance, the result is ruler-flat response; reduce the bias, and a peak begins to appear at high frequencies. So you can perk up high-frequency response by recording with the deck set for a tape requiring less bias than the tape with which you're working.

Typically this would mean recording and playing back a Type 2 ferricobalt or chrome as though it were a Type 1 ferric, which requires less bias current. The resulting peak will fall into the frequency range where azimuth misadjustment robs response. If the degree of bias mismatch is just right, the amplitude of the "correction" may even be just about what you want. The trouble with this technique is that it's hard to control quantitatively, and results tend to be unpredictable when you switch tape types.

It appears that Fuji has sought to do something similar in its GT-1 cassettes, which are labeled "for car stereo." The company's Type 1 oxide is formulated to deliver more high-frequency output than conventional LN oxides when both are used with "normal" Type 1 recording settings. I find the extra "zing" subtle at best—certainly not enough to counteract any serious azimuth problem. But there are other advantages to the GT-1. Its shell is molded of a plastic rated dimensionally stable to 230 degrees (though it's not as rigid, even at normal temperatures, as Loran's superstable Lexan shell). Also of interest is its tactile coding for the two cassette sides, whose asymmetrical design helps you find the side you want even in the dark.

FIGHTING AMBIENT NOISE

Compression is another technique that I wouldn't normally recommend for home taping, but one that can make a major contribution to listening enjoyment with car or personal-portable playback. Though compression has become something of a dirty word in this era of digital recording, the truth is that even Compact Discs are often compressed. Polygram, for instance, doesn't allow its CDs the full run of that medium's nominal 90 dB, on the grounds that trying to reproduce so extreme a range is impractical for most consumer purposes. In fact, we live

FUJI'S GT-1 CASSETTES are specifically designed for car use, with heat-resistant shells and tape formulated to give a slight rise at high frequencies.



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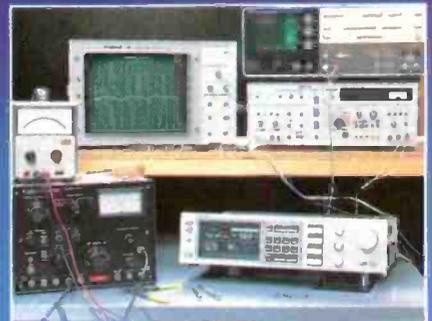
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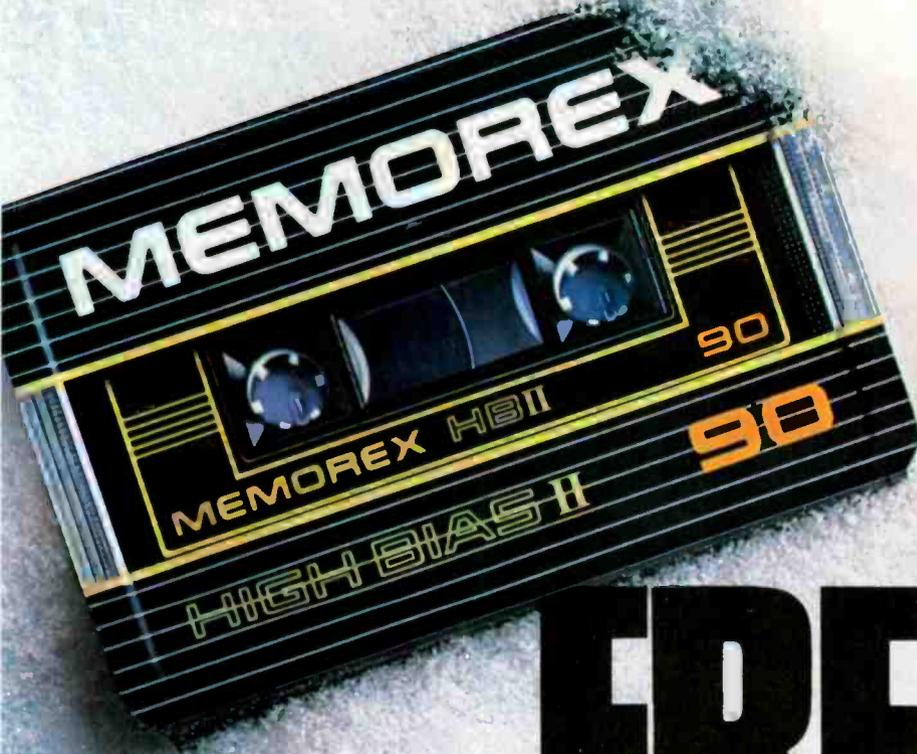
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daily with music reproduction whose dynamic range is compressed in varying ways and to varying degrees, and it seems that the vast majority of listeners never notice.

The benefit of compressing recordings destined for portable use is that it enables you to hear quiet musical passages when ambient noise is competing for your attention. And if the loudest sounds are squeezed closer to the softest, you won't have to turn the volume up so far that loud passages become intolerable and potentially ear threatening, an especially acute problem with headphone listening.

The best method for compressing wide-range material probably is a little gain-riding as you make your dubs. Though the process can be intimidating at first, it becomes a challenge and an adventure to see how musically natural you can make the final product. In its simplest form, gain-riding consists of gradually boosting the faintest passages—the ones that you ordinarily must strain to hear—and then fading them away again before the next fortissimo.

The job is easier if you know the music well enough to anticipate its climaxes, but with concentration you can develop a sixth sense about where composers and arrangers are likely to go next. When a sudden outburst catches you with your fader up, the result is overrecording. Never mind: Start your dubbing over and learn from the experience. Pretty soon you'll find that you can take a bassoon solo that's 30 or 40 dB below the level of the full orchestra and unobtrusively sneak it up by 15 dB or more during the first few measures. As long as you can get the level back down in time, you're home free.

A stereo recorder with a built-in ALC (automatic level control)—which these days is likely to mean a model contained within an inexpensive one-brand rack system—can be used to make dubs with reduced dynamic range. The compression won't be as subtle as good gain-riding by any means, but it could be quite acceptable.

If you decide to keep your dubs uncompressed, noise reduction will be obligatory. Dolby B is fast becoming as standard in portable and car decks as it is at home, and both Dolby C and DBX are appearing in more and more

UPDATING YOUR PERSONAL-PORTABLE

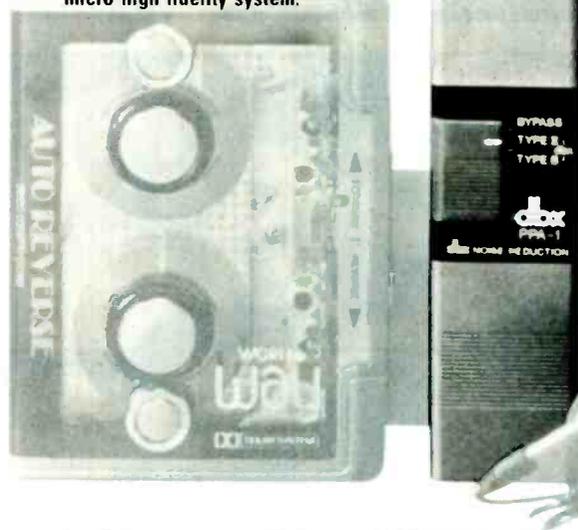
IF YOU HAVE A POCKET-PORTABLE cassette player with no noise reduction—and that includes most of the models made to date—you can upgrade it with a cleverly designed outboard noise reduction adapter from DBX: the PPA-1, also known as the Silencer.

This little plastic box has a belt clip, an off/off switch, a three-position mode selector, an output level control, a stereo mini jack, and a one-foot cord terminated in a stereo mini plug. You place two AAA cells (not supplied) into a bottom compartment, insert the mini plug into the headphone jack on your player and your headset's plug into the PPA-1's jack, and you're ready to go.

The first step is to adjust the output of your tape player until the loudness seems approximately the same in the DBX and bypass modes. From then on, level adjustments are made only on the PPA-1. In addition to handling cassettes recorded without noise reduction or with DBX, it will accommodate those made with Dolby B, using what the adapter calls the "DBX B" mode. This is where the initial level-setting is necessary, although the tracking of the Dolby signal is only approximate.

As the instructions say, if the sound of a Dolby tape seems preternaturally dull, crank up the output of your player a little. With touch-ups of this sort, I got very respectable results quite easily with my tapes and player, and I can't imagine why this method should not work as well with most portables of at least fair quality. (Spectral balance in decoding of DBX tapes isn't level-dependent, so there you needn't worry about level.)

The PPA-1 noise reduction adapter costs \$50 and is a good bet if you want to turn a garden-variety portable into a micro high fidelity system.

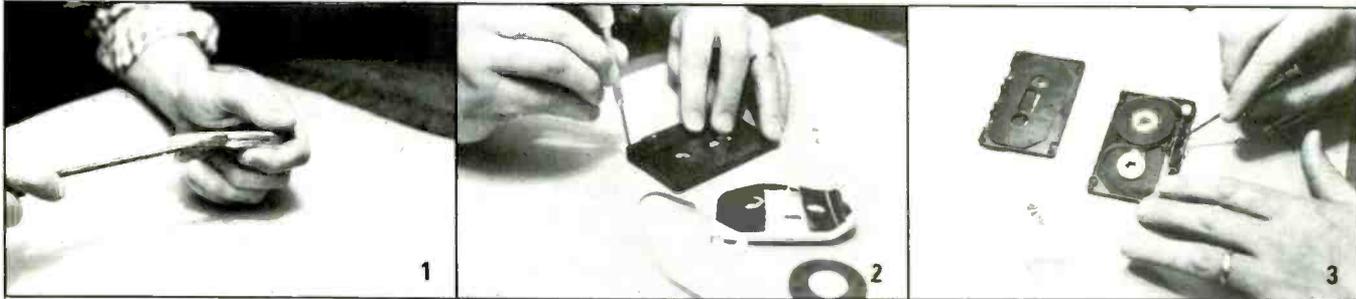


models. (And you can add DBX to a portable player: see "Updating Your Personal-Portable," above.) Don't sell these features short even if you're prepared to live with compression as a musical way of life. Tape hiss and ambient noise don't always occupy the same frequencies, and therefore hiss isn't always masked by wind noise and such. Noise reduction simply keeps hiss from becoming one more problem of listening away from home.

And finally, a word of advice if

your portable or car deck also is a recorder. The erase head may operate on DC, rather than the magnetically more efficient AC oscillators of home decks. If so, you may get quieter tapes if you take care to bulk-erase any cassette before rerecording on it. It's a good idea with home decks, too, but here it's even more important—particularly if you own one of those rare battery portables that will record on metal tape, which is relatively difficult to erase.

HOW TO REPAIR YOUR CASSETTES

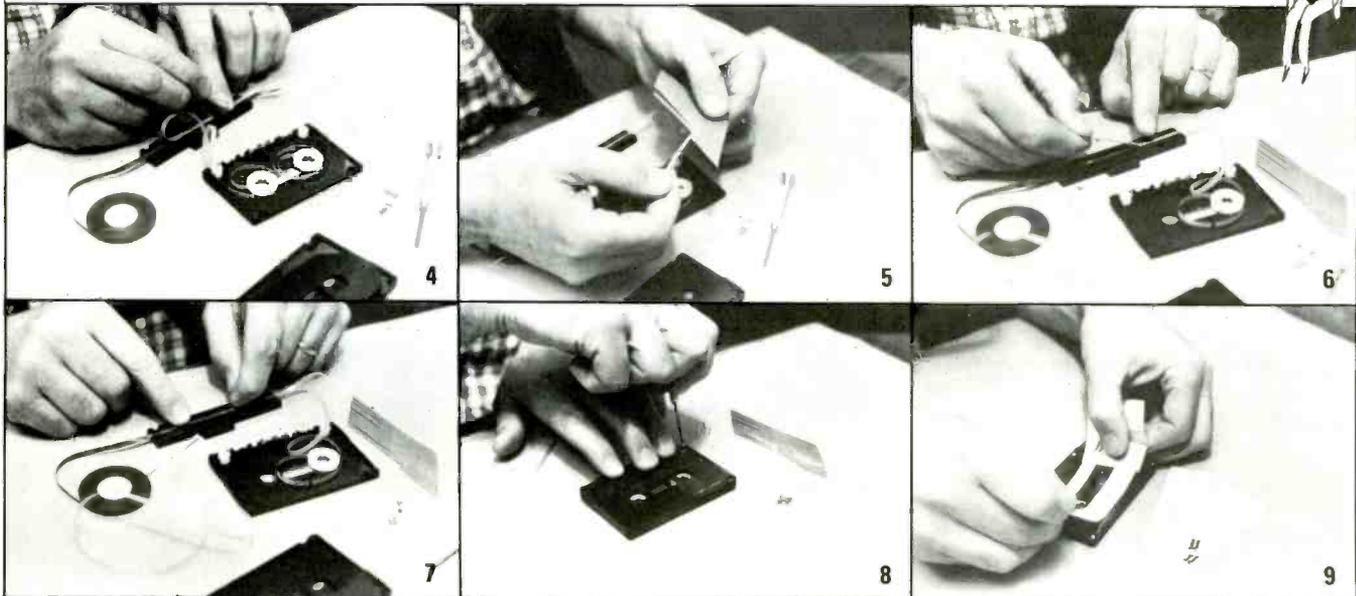


THE SHELL GAME

THE EASIEST WAY to repair damaged cassettes is to buy a kit that contains the necessary ingredients—illustrated here by the Radio Shack Professional Cassette Tape Repair Kit. Often, as with this heat-warped shell, the first job is to remove the tape. Cassettes with sonically welded or snap-together shells must be pried open rather like a clam. A large-blade screwdriver inserted into the erasure-prevention slots is the safest means of forcing the halves apart (Photo 1). A pocket knife can be helpful, but beware of damaging the tape. The new black shell supplied in the kit is held together with screws (Photo 2), as are those of most premium blank cassettes. If you take apart one of your own cassettes to make use of its shell, carefully note the position of all

parts—the slipsheets, the guide wheels, the pressure pad and spring, and the shield (the little metal box just behind the pad-and-spring assembly).

Usually, you will be able to keep the salvaged tape on its hubs and substitute them for those in the new shell. (If not, observe how the tape in the new shell is locked into its hubs, remove that tape, and substitute the tape you are restoring.) Place the tape and hubs in the shell, carefully using a tool to coax the tape into its path around the guide wheels, past the fixed guides, and in front of the pressure pad (Photo 3). Then close the shell, making sure that all parts are correctly aligned with the upper as well as the lower half.



SAVED BY A SPLICE

TO CUT OUT A LENGTH of damaged tape or to replace damaged leader, you need a splicing block (supplied with the Radio Shack kit). Most blocks have both diagonal and perpendicular cutting slots, for use with a single-edge razor blade. The diagonal cut will make the quieter splice. Cassette tape must be inserted "upside down" by open-reel standards because it is wound with the oxide out, and the splicing tape must be applied to the backing. Never touch the oxide side of any tape you plan to save.

Place the two tape ends in the splicing block, overlapping them so that the splice point on each falls at the diagonal cutting

slot. Cut through both thicknesses with a single stroke (Photo 4) and carefully remove the unwanted end of the upper layer. Next, take a splicing-tape patch from the sheet (Photo 5) and apply it to the splice point, using the paper backing as a handle and as a guide to align the patch in the block (Photo 6). Burnish one end of the patch with a fingernail, pull the paper backing from the other half, and burnish it (Photo 7). Then carefully remove the tape from the block and wind it into the shell by turning the hubs within it. Now all that's left is to screw the two halves of the shell together (Photo 8) and affix the supplied labels (Photo 9). HF

NEW
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*Digital Audio
Video
Software Reviews*

How VHS Hi-Fi Works

BY

PETER W. MITCHELL

WHEN THE FIRST VHS videocassette recorder appeared in 1978, the home VCR industry began a game of technological leapfrog. Sony, which had introduced the Beta VCR two years earlier, found itself competing with a system that offered something extra at the outset: twice as much uninterrupted recording time.

The Beta camp quickly responded, and the battle seesawed with a multiplicity of tape lengths, running speeds, and elaborately programmable

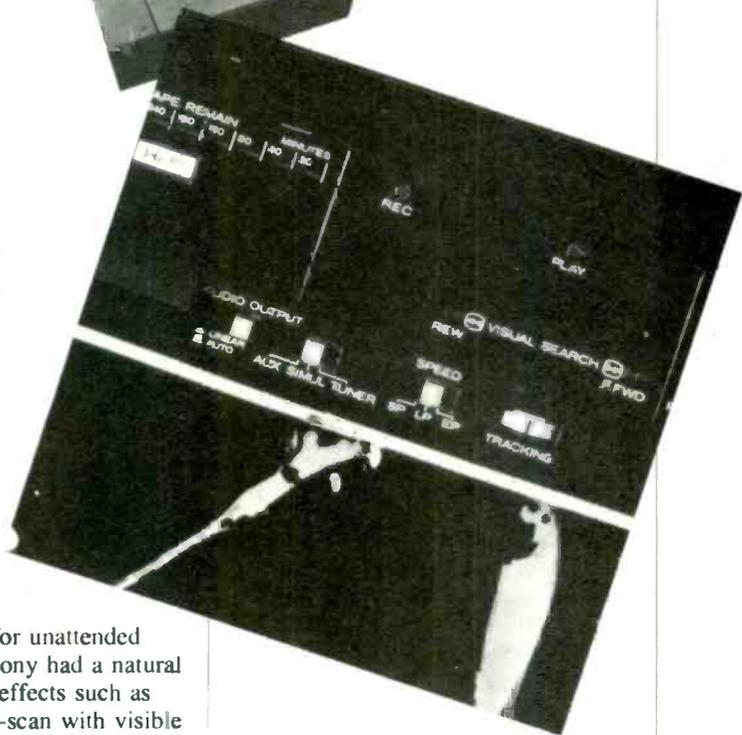
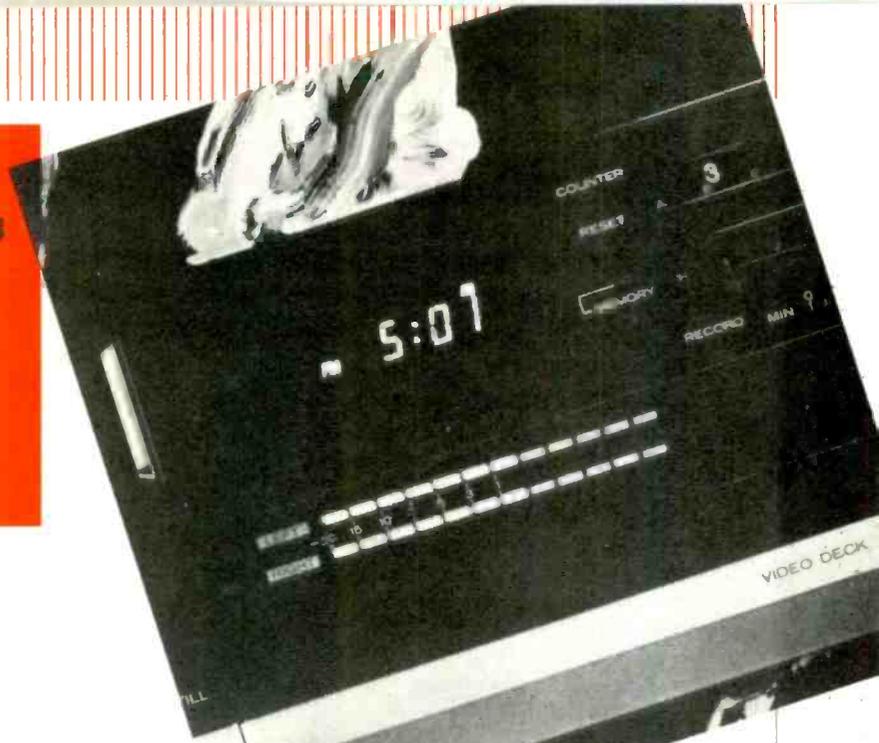
Audio frequency
modulation brings
near-digital-
quality sound to
VHS decks.

tuner/timer systems for unattended recording. At first, Sony had a natural advantage in special effects such as slow-motion and fast-scan with visible picture, because the Beta winding pattern permits the tape to remain in contact with the head drum at all times. But the VHS camp ultimately managed to come up with equally satisfactory special-effects techniques.

The competition continues today—with the delighted consumer reaping the benefits. A year ago Sony launched

a major new advance called Beta Hi-Fi that transformed VCR sound from mediocrity to true high fidelity. The basis of Beta Hi-Fi is FM (frequency modulation) recording—using the audio waveforms to modulate two pairs of FM carrier signals and then recording those FM signals together with the video on the tape. It is fair to say that FM recording improves the sound of videotape playback as

Peter W. Mitchell is the proprietor of Mystic Valley Audio, a design and consulting company, and a frequent contributor to these pages.



dramatically as Dolby Stereo improves the sound of theatrical motion pictures. And not incidentally, audio FM (AFM) recording opens the door to home reproduction of the full sonic impact of a Dolby Stereo film on videocassette. (See "A New Dimension for Video Sound," November 1983.)

Initially, it wasn't certain that the audio FM carriers could be included in the VHS video recording format. But this has indeed been accomplished, and VCRs equipped with VHS Hi-Fi will be on the market soon from JVC, Matsushita (Panasonic and Quasar), Hitachi, RCA, and other VHS suppliers. (See test report on the Hitachi VT-88A on page 49.)

FM RECORDING

Frequency-modulated recording is not a new idea. All videodisc and VCR systems use it for their video signals, while the CED and LaserVision videodisc systems also use it for audio. The obstacle to including FM audio in VCRs arose because no space was reserved for audio in the FM recording spectrum when the Beta and VHS formats were originally developed.

Instead, the audio was split off and relegated to a separate track, one millimeter wide, at one edge of the tape. Deprived of the benefit of the wideband heads on the spinning head drum, the audio was recorded directly on the slow-speed tape by a separate head located several inches downstream from the drum, using the same technology as in audio cassette decks. Since the videotape moves past the stationary audio head at a crawl (only about a half-inch per second at the Beta III and VHS EP speeds), the quality of the direct analog recording is just adequate for dialogue—and the tape flutter at these slow speeds sometimes makes even speech sound funny. Conversion to stereo didn't help: When the 1mm mono audio track was split into 0.35mm tracks for the two channels and guard band, nearly 10 dB in signal-to-noise (S/N) ratio was lost. Adding Dolby B to VHS Stereo decks restored the S/N ratio to what it was in mono, but exacerbated the chronic problem of high-frequency distortion and rolloff inherent in the audio track.

In FM recording the audio signal is not recorded on the tape directly. Instead, the audio waveform modulates an FM carrier, causing the carrier's

frequency to shift up and down at a rate that is equal to the frequency of the audio signal and by an amount (deviation) that depends on the amplitude (volume) of the audio signal. Thus, with a 400-Hz tone, the frequency of the FM carrier will shift up and down 400 times per second. The up-and-down deviation of the FM

carrier is less for soft sounds and greater for loud ones.

The essential advantage of this indirect method of recording is that it alters the relationship between recording flaws and the quality of the sound. For instance, frequency response is uniform from 20 Hz to 20 kHz, while on the direct analog track

BETA HI-FI RECORDING FORMAT

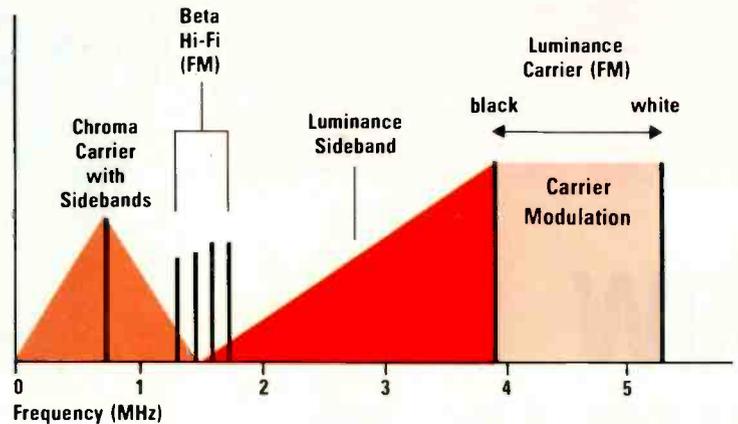


FIG. 1. BETA HI-FI'S four audio FM carriers (two each for the left and right channels) are sandwiched between the chroma and luminance signals. To make room for them, the luminance carrier is shifted up in frequency (in comparison to standard Beta) by 400 kHz, so that it ranges between 3.9 and 5.2 MHz.

VHS HI-FI RECORDING FORMAT

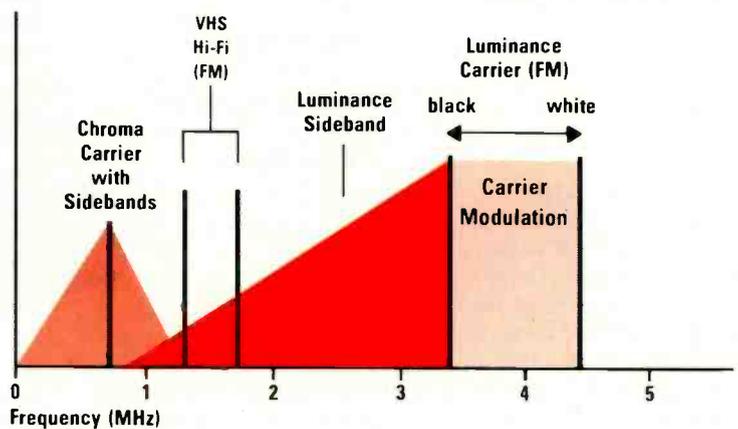


FIG. 2. THE VHS RECORDING format has no convenient space for the audio FM carriers. VHS Hi-Fi, therefore, uses only a single carrier each for the left and right audio channels (at 1.3 and 1.7 MHz, respectively) and minimizes crosstalk and video interference by using differently canted audio and video recording heads.

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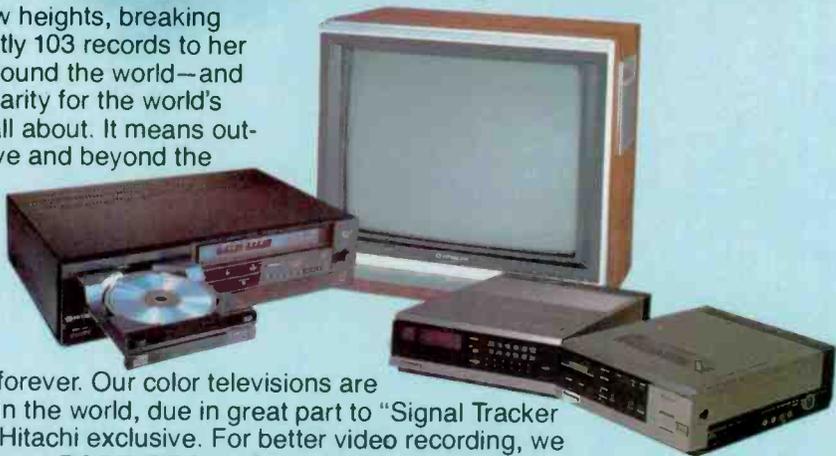
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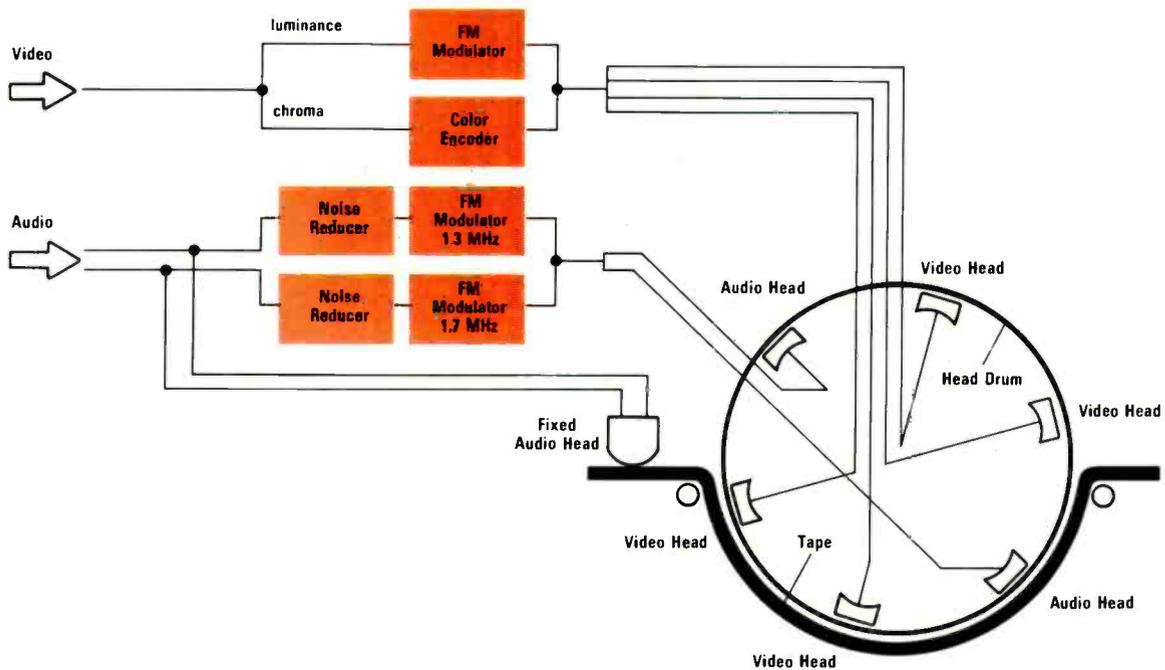


FIG. 3. IN VHS HI-FI RECORDING, the left- and right-channel audio signals are compressed (to be expanded in playback), modulated on separate FM carriers, and recorded via two audio-only heads mounted on the rotating head drum. The higher-frequency video information is then recorded over the audio. A stationary head records a standard audio track for compatibility with non-Hi-Fi VCRs.

the bass rolls off below 80 Hz and the treble dies above 8 kHz (or lower, depending on speed, tape type, and tape-to-head contact, which is sometimes problematic in VHS Stereo's left channel, nearer the edge of the tape). Perhaps the most dramatic advantage of FM audio is the remarkable solidity and clarity resulting from the virtually total elimination of wow and flutter. (In an FM recording system, flutter is not heard as unsteadiness or fuzziness but simply as background noise.)

THE VCR RECORDING SYSTEM

As you may recall from our previous discussion of this subject ("How Beta Hi-Fi Works," August 1983), the composite video signal is reformatted by the VCR's electronics before it is recorded. The video signal that is recorded on tape is made up of three parts (Fig. 1)—the luminance carrier, the lower luminance sideband (the upper one is at too high a frequency range to be recorded), and the chroma information. The luminance

signal expresses the light-to-dark gradations in the picture via variations in the frequency of the FM carrier. The brightest white highlights shift the carrier up to about 5 MHz; the black synchronization bar between video frames moves it down to below 4 MHz. The luminance sideband, a by-product of the modulation process, conveys the actual picture information, while the chroma subcarrier and its sidebands carry all the color information.

The engineers who developed Beta Hi-Fi took advantage of the small gap around 1.5 MHz between the chroma and luminance sidebands. They shifted the luminance carrier and sidebands up slightly in frequency to enlarge that gap and placed the two pairs of audio FM carriers in the space.

Why two pairs? Because of a basic compromise in the design of all modern VCRs, arising from the way television pictures are formed. The video head drum rotates 30 times per second, making one complete turn in one thirtieth of a second, which is the

duration of one complete 525-line video "frame" on the TV screen.

Each TV frame consists of two 262.5-line "fields" alternating at intervals of one sixtieth of a second, with their scanning lines interleaved on the screen. Therefore, every VCR has at least two heads located on opposite sides of the video drum (one for each field), with the signal switched back and forth between them as the drum spins. Each field is recorded on one diagonal stripe across the tape. When one field ends, the head on the opposite side of the drum begins to record the next field on the adjacent track (Fig. 4).

The compromise occurs because long recording times require a slow tape speed. This causes adjacent tracks to overlap, resulting in crosstalk between them. Azimuth recording helps to minimize the video crosstalk. By tilting one head gap forward by about six degrees and the other back from vertical by the same amount, video head A will tend to reject the field B signal and vice versa. But in

Beta Hi-Fi isn't sufficient to prevent interference between the relatively low-frequency *audio* carriers. So it is necessary to use two alternating pairs of FM carrier frequencies for successive tracks. Video head A carries video field A and audio FM signals at 1.38 MHz (left channel) and 1.68 MHz (right); on the next track, video head B records video field B plus audio FM signals at 1.53 and 1.83 MHz. In playback, these signals are switched 60 times per second as the head drum rotates, to recover continuous video and audio output signals.

THE VHS DIFFERENCE

The video head drum in VHS machines is 16 percent smaller than that in Beta decks. Consequently, the writing speed of the VHS heads across the tape is 16 percent slower, making the available recording bandwidth narrower than in Beta. The modulation range of the VHS luminance carrier (Fig. 2), for instance, is from 3.4 to 4.4 MHz. As the skeptics predicted, there is no gap between the chroma and luminance sidebands in the VHS spectrum where audio FM carriers could be conveniently added.

For VHS Hi-Fi, audio FM carriers are recorded at 1.3 and 1.7 MHz for the left and right channels, respectively. This initially posed two problems: crosstalk between the audio carriers and the luminance sidebands (which would produce herringbone interference patterns in the picture) and crosstalk between the FM signals in overlapping adjacent tracks (the same problem that forces Beta Hi-Fi to use two carrier frequencies for each channel). Both problems were solved in one bold stroke—by using a separate pair of heads for VHS Hi-Fi's audio FM carriers.

Tilting the two audio-only gaps at plus and minus 30 degrees reduces crosstalk between audio and video to negligible levels. And even though the video is recorded directly over the audio on the tape, the two are effectively separated in playback by the difference in azimuth angles (Fig. 4).

That's right: The video is recorded directly on top of the audio. As the head drum spins, it records the audio FM signal and then overwrites the video signal on the same track, without destroying the audio! This technique has been christened with an exceedingly high-tech name—"depth

AZIMUTH RECORDING

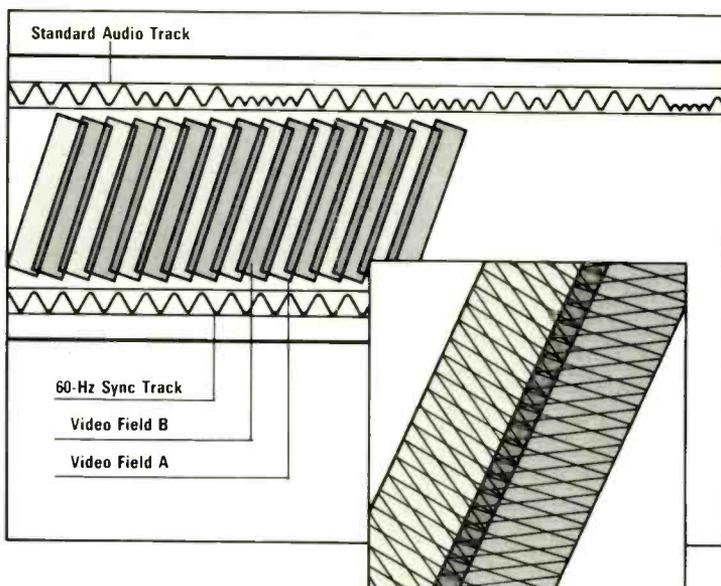


FIG. 4. THE LOW-SPEED HELICAL-SCAN recording used in VCRs creates some overlap of adjacent tracks, or fields. To minimize the resulting crosstalk in a VHS Hi-Fi VCR, audio information on adjacent tracks is recorded at $\pm 30^\circ$, video at $\pm 6^\circ$ (inset). The left and right channels, modulated on FM carriers, are recorded consecutively.

multiplex recording"—but there's actually nothing particularly novel about it.

If you were to disable the erase head in a conventional audio recorder and deliberately record a new musical selection on an old one, you would find that the high frequencies in the first recording were erased (because they tend to be recorded near the surface of the tape). But the low-frequency portions of the earlier recording would still be there, mixed with the new signal.

Similarly, in VHS Hi-Fi the audio FM carriers (which are at relatively low frequencies) are recorded with enough strength to penetrate the full depth of the tape's oxide layer. The video signal is then written on top, with the critical high-frequency luminance signal tending to be captured in the tape's surface layer. Even if the overrecording causes some weakening of the VHS Hi-Fi carriers, it doesn't matter, because it's FM. And as in FM broadcasting, the quality of the recovered audio signal stays the same as long as the FM carrier is strong enough for full limiting.

And that brings us to the final problem: noise reduction. As we noted earlier, in any FM recording system the flutter of the tape mechanism produces frequency deviations of the carrier that are demodulated in playback as background noise; the S/N ratio of practical FM recorders is typically limited to 55 or 60 dB. VHS Hi-Fi gains about 6 dB in S/N by setting its maximum carrier deviation at ± 150 kHz (instead of the ± 75 kHz used in FM broadcasting). But to gain their advertised 80-dB S/N ratios, both Beta and VHS Hi-Fi rely on compansion (*compression* in recording and *expansion* in playback) for noise reduction. Matsushita and JVC experimented with DBX, but the VHS manufacturing group finally agreed to adopt a new compander developed especially for VHS Hi-Fi.

As is often the case in VCR history, the two formats are again at parity, and you can pick the one you prefer. Both Beta and VHS now offer audio FM recording for wide-range stereo sound, differing in details but, theoretically at least, comparable in overall performance.

HF



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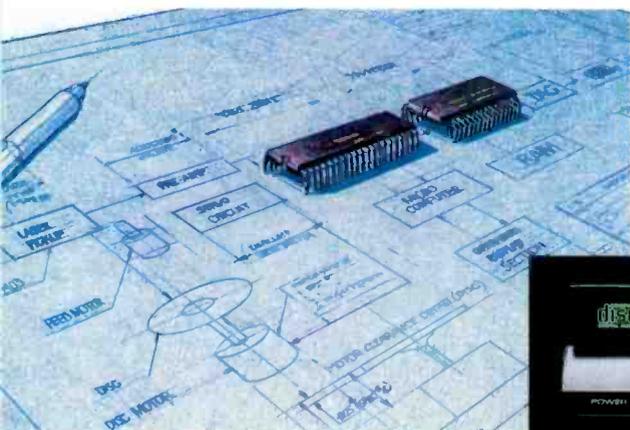
YAMAHA INTRODUCES THE SECOND-GENERATION GAP.

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But perhaps its most user-friendly feature is the \$599* price tag.

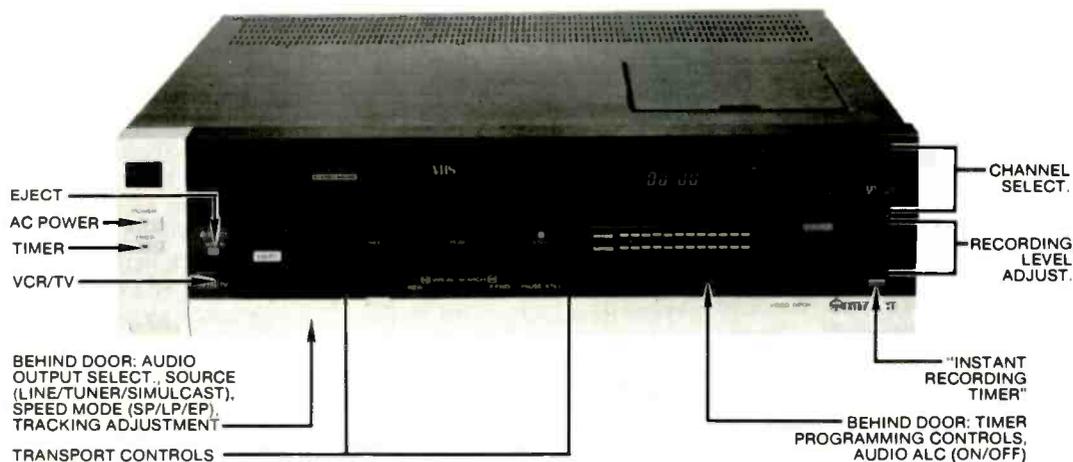
The CD-X1 from Yamaha. The others don't have anything like it. But you can have one just like it. At your Yamaha dealer now.



*Suggested Retail Price

HITACHI VT-88A VHS HI-FI VCR

Hitachi VT-88A VHS videocassette recorder, with 14-day/6-event programmable tuner/timer and VHS Hi-Fi stereo audio. Dimensions: 17 1/4 by 4 3/4 inches (front panel), 14 3/4 inches deep plus clearance for connections. Price: \$1,095. Warranty: "limited," two years parts, 90 days labor. Manufacturer: Hitachi, Ltd., Japan; U.S. distributor: Hitachi Sales Corp. of America, 401 W. Artesia Blvd., Compton, Calif. 90220.



THE VHS CAMP has at last responded to the Beta Hi-Fi challenge with an improved VCR audio recording system of its own, not surprisingly called VHS Hi-Fi. The Hitachi VT-88A is the first VCR using the new system to come into our hands.

The main distinction between VHS Hi-Fi and Beta Hi-Fi is that the VHS technique uses an extra set of recording heads on the rotating drum to lay down the audio information, after which the video heads "overwrite" it with picture information. (In the Beta Hi-Fi

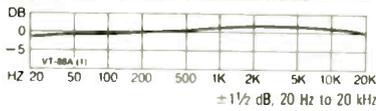
system, audio and video information are recorded simultaneously by the same set of heads.) The VHS group calls its technique "depth multiplex," because the audio information lies in a deeper portion of the tape coating than the video information. In a sense, that's true, but what really keeps the two apart is a different recording azimuth for audio than for video information— ± 30 degrees for audio, ± 6 degrees for video.

The alternation between positive and negative azimuth angles serves to

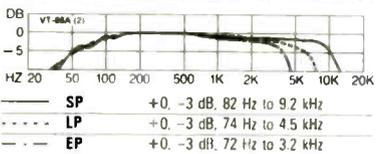
VCR SECTION

Except where otherwise indicated, data are for all speeds—SP, LP, and EP (SLP). All measurements were made at the direct audio and video outputs, with test signals applied to the direct audio and video inputs. For VHS Hi-Fi, the 0-dB reference input level is the voltage required to produce 3 percent third-harmonic distortion at 315 Hz; for the standard audio recording mode, it is 10 dB above the voltage at which the automatic level control (ALC) produces 3 dB compression at 315 Hz. The 0-dB reference output level is the output voltage from a 0-dB input.

VHS HI-FI RECORD/PLAY RESPONSE (-20 dB; stereo)



STANDARD RECORD/PLAY RESPONSE (-20 dB; mono)



	SP	LP	EP
standard	+0, -3 dB, 82 Hz to 9.2 kHz	+0, -3 dB, 74 Hz to 4.5 kHz	+0, -3 dB, 72 Hz to 3.2 kHz
AUDIO S/N RATIO (re 0-dB output; R/P; A-weighted)	47 dB	45 dB	46 1/2 dB
VHS Hi-Fi	84 dB	84 1/2 dB	80 1/4 dB

INDICATOR CALIBRATION (315 Hz; VHS Hi-Fi)	
for 0-dB input	> +8 dB
for -10-dB input	0 dB

DISTORTION (THD at -10 dB input; 50 Hz to 5 kHz)	
standard	VHS Hi-Fi
SP	≤ 3.2%
LP	≤ 3.9%
EP	≤ 4.5%
standard	≤ 0.75%
VHS Hi-Fi	≤ 0.71%
VHS Hi-Fi	≤ 0.75%

CHANNEL SEPARATION (315 Hz; VHS Hi-Fi)	
standard	60 dB

INDICATOR "BALLISTICS"	
Response time	1.6 msec
Decay time	≈ 250 msec*
Overshoot	0 dB

FLUTTER (ANSI weighted peak; R/P)	
standard	VHS Hi-Fi
SP	± 0.13% avg.
LP	± 0.35% avg.
EP	± 0.35% avg.
standard	< ± 0.01%
VHS Hi-Fi	< ± 0.01%
VHS Hi-Fi	< ± 0.01%

SENSITIVITY (for 0-dB output; 315 Hz)	
VHS Hi-Fi	440 mV
standard	1,200 mV

AUDIO OUTPUT LEVEL (from 0-dB input; 315 Hz)	
VHS Hi-Fi	1.7 volts
standard	0.56 volt

AUDIO INPUT IMPEDANCE	
standard	41k ohms

VIDEO RECORD/PLAY RESPONSE			
	SP	LP	EP
at 500 kHz	+1/4 dB	+1/4 dB	-1/4 dB
at 1.5 MHz	-4 1/4 dB	-4 1/4 dB	-7 3/4 dB
at 2.0 MHz	-7 3/4 dB	-7 3/4 dB	-11 1/4 dB
at 3.0 MHz	-16 1/4 dB	-16 1/4 dB	-14 dB*
at 3.58 MHz	-21 dB	-21 dB	-5 dB*
at 4.2 MHz	**	**	**

LUMINANCE LEVEL	
standard	6% high

GRAY-SCALE NONLINEARITY (worst case)	
standard	≈ 11%

CHROMA LEVEL	
standard	2 1/2 dB low*

CHROMA DIFFERENTIAL GAIN	
standard	≈ 8%

CHROMA DIFFERENTIAL PHASE	
standard	≈ ± 4°

MEDIAN CHROMA PHASE ERROR	
standard	0°

*See text
**Too low to measure

prevent crosstalk between adjacent tracks (successive fields). So, unlike the Beta Hi-Fi system, which uses a different set of FM carriers for adjoining tracks to keep them apart, VHS Hi-Fi can use the same set of carriers on both and rely on the azimuth difference to prevent interference. The single pair of carriers—one for the left channel, one for the right—not only simplifies the demodulation process (the FM "receiver" needn't be "retuned" 60 times a second) but also allows the use of a wider deviation ratio to improve the signal-to-noise (S/N) ratio.

In describing the specifics of the Hitachi VT-88A, we are handicapped by the lack of an owner's manual or full technical information, neither of which was available in time for this review. But here's our best effort at doping out what it does (and doesn't) do. The front end is electronically tuned and covers 105 VHF, UHF, and CATV channels. You can preset any 14 channels via controls under a top-panel lid and tune them via front-panel pushbuttons. There's a 14-day/6-event timer, plus an "Instant Recording Timer" (IRT) to quickly set taping time and length in simple 30-minute increments. You adjust clock and program times with plus and minus pushbuttons behind a door at the lower-right portion of the front panel. Here too are a dimmer switch for the display and an ALC (automatic level control) on/off button.

Like Beta Hi-Fi, VHS Hi-Fi maintains compatibility with conventional systems of its kind by recording audio information on the standard edge track as well. Thus, tapes made on the VT-88A can be played on non-Hi-Fi decks, and regular VHS tapes will play on the VT-88A, albeit in neither case with Hi-Fi sound. According to Hitachi, the VT-88A reproduces a stereo edge-track recording in stereo but records the edge track in mono, so Diversified Science Laboratories could not check stereo performance in this mode. The company also informs us that the VHS Hi-Fi noise reduction system—a new development called PNR—is used both on the edge track and for the Hi-Fi recording. Because technical details on this system have not been released, we cannot comment on its compatibility with the Dolby B system used for normal VHS Stereo edge-track

recording. When the ALC button is pressed, recording levels for both VHS Hi-Fi and edge-track recording are automatically controlled. With the button released, you set recording level with dual sliders, guided by 12-segment LED indicators calibrated from -20 to +8 dB. Above 0 dB, the LEDs change from green to red and the decay time increases from 250 to almost 1,250 milliseconds (msec). DSL's tests suggest that in the VHS Hi-Fi mode you can record well into the red without fear of overload. Total harmonic distortion (THD) doesn't reach 3 percent until the indicator is off scale, and the 0-dB reading (the first red LED) is a full 10 dB below 3 percent THD at 315 Hz. At this level, midband distortion is less than 0.25 percent, rising to 0.75 percent at 50 Hz and 5 kHz. By 10 kHz it's up to 2.5 percent, but with normal program material, you'll never have that much high-frequency energy to contend with.

Undoubtedly, you'll want to set recording level manually in the VHS Hi-Fi mode to make optimum use of its wide dynamic range—more than 80 dB even at the slowest (EP) speed and 84 dB or more at LP or SP. The limited dynamic range on the edge track (45 to 47 dB, depending on speed) makes use of ALC advisable, so DSL measured edge-track performance with the ALC engaged. (As far as we can tell, Hitachi's arrangement precludes simultaneously using the ALC on the edge track and setting VHS Hi-Fi level manually.)

DSL measured edge-track distortion at the "knee" of the ALC curve, above which the recording level is kept virtually constant regardless of the input voltage. (A 1-dB increase in input causes less than a 1/4-dB change in recorded level.) Midband distortion is 2 to 2.25 percent, depending on speed, and 3.25 to 4.25 percent at 50 Hz. This is at least three to five times as great as in VHS Hi-Fi. Flutter also is much greater on the edge track, with peaks of ±0.15 percent at the SP speed and ±0.45 percent at LP and EP, whereas the flutter in VHS Hi-Fi is below our measurement limit of ±0.01 percent at any speed.

Another big difference is in frequency response, although in the SP mode the bandwidth of the VT-88A's

● GFF/VOL push: BAL
○ TRE push: BASS



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Not for the meek

There are some people who simply can't appreciate all that Sanyo's new FT-E25 car stereo system has to offer.

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sophisticated FM Optimizer system deliver superb stereo reception without fading or "picket fencing." And besides Dolby B* it has super-advanced Dolby C* noise reduction to keep tape hiss inaudible.

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If noise, hum and distortion turn you off, turn on Sansui's new AU-D77X* integrated amplifier for pure, true sound.

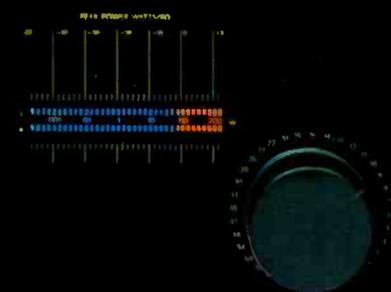
Only Sansui offers a trio of exclusive noise-eliminating innovations.

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And finally, Sansui's latest contribution to silent performance, the Ground Free circuit, remarkably reduces Interface Hum Modulation (IHM) distortion in the power supply.

The result is clean, uncluttered music that's virtually free of noise, hum and distortion. (You also get this impeccable



Sansui's new GF amplifiers depart from the conventional to assure inaudible distortion even at the highest level of sound.

THE SILENT TREATMENT

performance with Sansui's 130-watt* top-of-the-line AU-D11 II integrated amp.)

One outstanding performer deserves another. The TU-S77X tuner adds a new dimension to the state-of-the-art. Its new FM multiplex decoder improves channel separation and reduces distortion significantly. Also available is the TU-S77AMX tuner which automatically receives and switches to every approved AM stereo broadcast system.

The AU-D77X and TU-S77X make the perfect tuner/amp combination for people who appreciate great technology as much as they enjoy the silence in great sound. Get the "Silent Treatment" at your Sansui audio specialist, or write for literature.

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Putting More Pleasure in Sound.

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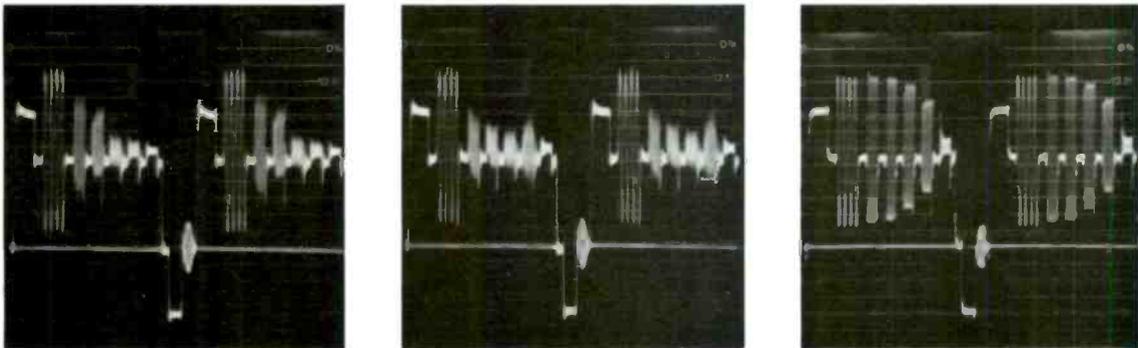
* AU-D77X - 110 watts, 0.0028% THD; AU-D11 II - 130 watts, 0.0025% THD.
Minimum RMS, both channels driven into 8 ohms, from 10-20kHz.

edge track is about the best we've measured, being only 4 dB down at 10 kHz. The top end drops off rapidly above 6.5 kHz in LP and is limited to about 4 kHz in EP. In VHS Hi-Fi, on the other hand, bandwidth extends from below 20 Hz to beyond 20 kHz and is essentially independent of recording speed.

On the samples we tested, however, the response uniformity varied according to the recording level. For example, at -10 dB (relative to the level at which 3 percent THD is reached at 315 Hz), which corresponds

head downstream. Hitachi has instituted a modification to eliminate this effect from production models, which should yield virtually ruler-flat response at all recording levels. We plan to check one of these units and will report the results next month.

In playback, the VT-88A automatically senses the presence of a VHS Hi-Fi recording, lights the Hi-Fi logo, and chooses that reproduction mode when the audio output switch is in AUTO. You can override the feature by pressing the switch to select the edge track in all cases. This switch, the



MULTIBURST RESPONSE for the VT-88A's recorder section running at SP (left), for the recorder at EP (middle), and for the TV tuner section (right). (The VCR's response at the LP speed is virtually identical to that in SP.) The test signal consists of a reference "white bar" (far left) followed by bursts at 500 kHz, 1.5 MHz, 2.0 MHz, 3.0 MHz, 3.58 MHz (the color-carrier frequency), and 4.2 MHz (the upper limit of the NTSC broadcast system). Each photo shows two complete multibursts. It is the video frequency response that determines horizontal resolution, or sharpness.

In SP, the VCR's response is down slightly at 1.5 and 2.0 MHz and drops off severely at higher frequencies. Nonetheless, this is excellent performance for a VCR. In EP, its response rolls off more swiftly (as one would expect) but bounces back up at 3.58 MHz. Output at that frequency is not stable enough for this apparent improvement to enhance the quality of recorded images, however. The tuner section's response is unusually extended, remaining essentially flat out to 3.0 MHz and showing just a slight dip at 3.58 MHz before falling off sharply at the upper edge of the NTSC band.

to a reading of 0 dB on the recording-level indicators, response is within $\pm 1/4$, $-1/4$ dB from 20 Hz to 20 kHz. At our standard response measurement level of -20 dB, the tolerance broadens to $\pm 1 1/2$ dB, and 10 dB further down it widens to +4, -1 dB. Close examination of the response curves suggested that this was caused by mistracking of the noise reduction system—something that should not occur in an FM recording system.

We therefore contacted Hitachi, which was likewise puzzled by the problem. Ultimately, the company discovered that the culprit was indeed compander mistracking, caused by bias leakage from the standard fixed audio

three-position recording-speed selector, the tracking control, and a three-position input selector (AUX, SIMULCAST, and TUNER) lie behind a flip-down door at the lower left of the front panel. (In playback, the correct speed is selected automatically.)

In AUX, the VT-88A can be used as a high-performance audio recorder. That's also the position you'd use for making home movies: There's no camera input as such, but a camera could be connected to the video line-input pin jack on the rear via a power-supply adapter. (There's no microphone input, either, so you'd need a microphone preamp to drive the audio line-input jacks; because audio

READ THIS AD AND YOU'LL BUY A HARMAN KARDON CASSETTE DECK



That's a bold statement, but Harman Kardon has been making bold audio statements for over thirty years, introducing the world's first high fidelity receiver, the first stereo receiver and ultrawideband frequency response. Harman Kardon was also the first company to use Dolby¹ in a cassette deck.

Today, Harman Kardon products continue to be so technologically advanced that "state-of-the-art" falls short of describing them. They have become "state-of-the-mind," the highest level at which the mind can create.

The CD491 is Harman Kardon's most sophisticated state-of-the-mind cassette deck and one of the few in the world that can equal the full range of human hearing. The CD491 has a remarkable 20Hz to 24kHz frequency response using any tape formulation, not just expensive metal tape. An audiophile would settle for nothing less. Even more remarkable is that in a national challenge², Harman Kardon measured frequency response and beat 98% of the competition, including units costing twice as much.

The CD491 incorporates a dual capstan transport with twin flywheels to insure perfect movement of the tape across its 3 high performance heads. The dual capstan serves to isolate the tape from the cassette shell while the dynamically balanced flywheels help generate a

consistently accurate tape speed. Together they enable the CD491 to reduce wow-and-flutter to an inaudible .025%. The only "wow" you'll ever hear is the reaction of people listening to your Harman Kardon cassette deck.

The CD491 incorporates Dolby HX Pro¹ for extended frequency response, plus Dolby B and C¹ for maximum noise reduction. Three precision heads offer improved performance and the convenience of monitoring while recording. Included is a Sendust head to withstand high record levels without overload and a ferrite playback head for extended high frequency response.

The combined benefits of the CD491's performance features allow for the accurate recording of more dynamic audio signals than previously possible. In fact, the large signal response (frequency response at 0Vu) of the CD491 is a virtually unrivaled 20Hz-20kHz \pm 3dB. This is especially significant as more demanding forms of software, such as digital audio, become available.

So, while other manufacturers continue to pile on unnecessary features and gimmicks, Harman Kardon continues to develop only fundamentally advanced audio equipment.

(1) Dolby is the registered trademark of Dolby Laboratories Inc.
(2) In 1982, Harman Kardon challenged individuals to bring in their cassette decks to a local HK dealer. All units were cleaned and demagnetized in order to insure fair test results. The Harman Kardon unit was factory packed.

Harman Kardon "Stacks The Deck" with FREE Maxell Tapes! See Your Dealer for Details.*

harman/kardon

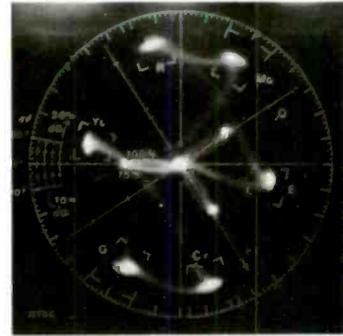
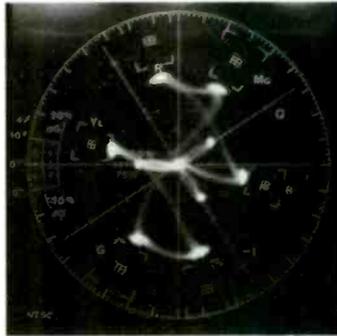
Our state-of-the-mind is tomorrow's state-of-the-art.

input sensitivity is rather low, the preamp's gain is an important consideration.) TUNER is the usual setting, enabling you to record cable or TV broadcasts via the built-in TV front end, and SIMULCAST makes it possible for you to record video from the tuner and audio from an FM receiver connected to the audio input jacks.

The VT-88A is a front-loader with power-assisted operation. Its transport controls respond to a light touch and are duplicated on a small infrared remote control. The remote also enables you to scan through the channels sequentially and to activate FRAME ADVANCE and FAST PLAY. The display doubles as both clock and footage counter, alternated by sequential taps on COUNTER. When MEMORY is engaged, the VT-88A rewinds and stops the tape at "9999." When the tape runs out, rewind and shutoff are automatic. A six-segment tape-remaining indicator senses tape and hub speed and suggests how much time you have left, in 30-minute increments to 120 minutes and then hourly to 240 minutes.

DSL'S TESTS on the VT-88A's tuner section indicate very flat video response to 3.0 MHz and a slight rolloff at the color-burst frequency (3.58 MHz). Although the tuner does not manage the full 4.2-MHz bandwidth of the NTSC system (no TV tuner we've seen does), it should provide close to 300 lines of horizontal resolution on a good monitor. Luminance level is very accurate, gray-scale nonlinearity fair but not outstanding. Chroma level is shy of the mark but not to the extent that it can't be corrected at the monitor. Chroma differential phase (hue variation with scene brightness) is very well controlled, but there's substantial chroma differential gain. Fortunately, most of it occurs only at the highest luminance level, so the color washout that it implies should rarely be noticeable. Color accuracy itself is very good, a 4-degree touch-up on the tint control being sufficient to bring all color vectors within $\pm 2\frac{1}{2}$ degrees of perfection.

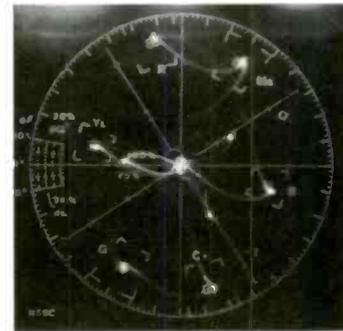
Audio response is almost dead flat out to 20 kHz. Obviously, there's no 15.7-kHz notch filter in this system, so we're not surprised at the relatively high level of the horizontal-scan component in the output. Taking that



VCR COLOR ACCURACY is very good and essentially identical at all three speeds. (The vectorscope photos shown here are for SP, which is the fastest.) The left-hand photo shows the uncorrected color. A $2\frac{1}{2}$ -dB increase in chroma gain puts all six color vectors (the small white blobs near the circumference of the grid) onto their targets, as shown in the right-hand photo. This simulates the best results one could obtain using the color control on a monitor—in this case, virtually perfect. The diffuseness of the color vectors is caused by chroma noise, which would show up in a video image as flecks of colored snow. Chroma noise is lowest in SP, slightly greater in LP, and considerably greater in EP. This is the usual pattern, and in no case is the noise worse than average. Indeed, at the two higher speeds, it is quite low for a VCR.

into account, the A-weighted signal-to-noise figures are quite respectable.

Video recording performance in the SP and LP modes is first-rate, with response down less than 8 dB at 2 MHz. At the slowest speed (EP), video response is down an equivalent amount at 1.5 MHz. (The apparent improvement in response at 3.58 MHz in the EP mode is not significant: The signal is too unstable to add anything

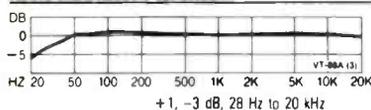


TUNER COLOR ACCURACY is very good. The vectorscope photo at left indicates low color saturation (chroma level) and a small amount of hue (chroma phase) error. The photo at right—made with $3\frac{3}{4}$ dB additional chroma gain and approximately 4 degrees of clockwise phase rotation—simulates the best results one could obtain using the color and tint controls on a monitor. This adjustment brings all six color vectors (the small white dots near the circumference of the grid) onto or very near their targets, which is excellent performance. In fact, the spread is actually $\pm 2\frac{1}{2}$ degrees or less.

TV TUNER SECTION

All measurements were taken at the direct audio and video outputs.

AUDIO FREQUENCY RESPONSE



AUDIO S/N RATIO (A-weighted)

best case (no video signal)	50 dB
worst case (window display)	36 3/4 dB

RESIDUAL HORIZONTAL SCAN COMPONENT (15.7 kHz)

-39 1/4 dB

MAXIMUM AUDIO OUTPUT (100% modulation)

ALC off	1.0 volt
ALC on	0.25 volt

AUDIO OUTPUT IMPEDANCE

930 ohms

VIDEO FREQUENCY RESPONSE

at 500 kHz	-1/4 dB
at 1.5 MHz	-1/2 dB
at 2.0 MHz	-3/4 dB
at 3.0 MHz	-1 1/4 dB
at 3.58 MHz	-4 1/4 dB
at 4.2 MHz	-19 dB

LUMINANCE LEVEL

4% high

GRAY-SCALE NONLINEARITY (worst case)

~22%

CHROMA LEVEL

3 3/4 dB low

CHROMA DIFFERENTIAL GAIN

~50%

CHROMA DIFFERENTIAL PHASE

~±2 1/2°

CHROMA PHASE ERROR

red	+3 1/2°
magenta	+3 1/2°
blue	+1 1/2°
cyan	+6 1/2°
green	+5°
yellow	+5 1/2°
median error	+4°



COLOR CONSISTENCY for the VT-88A's recorder section running at SP (left) and for its TV tuner (right). (The results for the VCR in LP and EP are essentially identical to those in SP, so we have omitted the photos for the slower speeds.) In each case, the ideal would be for the cluster of dots toward the left edge of the grid to be a single dot at the intersection of the nine-o'clock axis with the circumference. The radial spread of the dots indicates chroma differential gain, which is a measure of how much color saturation (chroma level) varies with changes in scene brightness (luminance). Their angular spread shows the chroma differential phase, which tells how much hue (chroma phase) shifts with changes in brightness. The VCR performs excellently in this test. The tuner also has very low differential phase, and its differential gain, though rather high, is mainly at the highest luminance level.

to the picture.) Luminance level, gray-scale nonlinearity, and chroma differential gain and phase are identical and excellent at all three speeds, and at none of them is there any measurable color error. Chroma level is on the low side at all speeds, but not unduly so; on our sample, however, it was somewhat unstable in EP, which could produce an annoying flickering of color intensity. And as usually is the case, chroma noise is substantially higher at the slowest recording speed than at SP and LP, which are quite good in this respect.

In our hands-on evaluation, we were mightily impressed with the VT-88A's tuner. It is noticeably more sensitive and noise-free (especially on Channels 2 through 7) than most. The gray-scale nonlinearity is barely noticeable, the chroma differential gain only in the very brightest scenes. Video record/playback performance is equally noteworthy at the SP and LP speeds. Unfortunately, the VT-88A's special video features do not work as well at those speeds as at EP. Still-frame in the SP mode is virtually useless: A wide noise bar is likely to cover more than half the picture. Fast-scan operation at that speed produces barely enough information to make the picture content discernible. LP special effects are a good bit better. There's

some bending at the top of the screen in still-frame, but it's livable, and you can follow the action in fast-scan. At the EP speed, the special effects are excellent. Still-frame couldn't be better, and the fast-scan is clear enough to follow with ease. Normal operation at the EP speed is at least up to snuff—better than on some other VCRs—but no match in definition, color noise, and color stability for the excellent performance at SP and LP.

TV-broadcast sound being what it is, we couldn't hear the problems DSL uncovered in the VHS Hi-Fi noise reduction system with that source, so we tried taping a high-quality piano recording on the VT-88A and playing it back over our reference high fidelity system. With this (admittedly taxing) test, we could readily distinguish between source and copy. The piano seemed to lose bass in the quiet passages, and there was a noticeable surging character to the VCR tape copy. Once the bias-leakage problem is eliminated, however, these effects should disappear entirely. With that proviso, we certainly would rank VHS Hi-Fi the equal of Beta Hi-Fi as a great step forward in VCR sound quality, bringing it almost up to the performance level of digital recording. We look forward to confirming that in our follow-up next month. **HF**

REVIEWS

*Pop and classical
music releases
on videodisc,
videocassette,
and digital
Compact Disc*

POPULAR COMPACT DISC

SONNY ROLLINS: Way Out West.

Lester Koenig, producer. MOBILE FIDELITY SOUND LAB MFCD 801 (digitally mastered analog recording; digital Compact Disc). LP: CONTEMPORARY 7530.

Way Out West" signals the Compact Disc debut for the analog audiophile mavens at Mobile Fidelity. There are three other titles in the company's first batch of digital discs, but this 1957 album is the standout. It also serves as a timely reminder that basic engineering technique is as crucial to good sound as any specific piece of equipment.

The session, teaming saxophonist Sonny Rollins with bassist Ray Brown and drummer Shelly Manne, demonstrates just how accurate early documentary stereo recordings could be. It was taped live, without overdubs—only a two-track Ampex 350 was used—and the resulting tracks are immaculate. Rollins's jabbing, playful phrases and mercurial tone are captured with a presence unsurpassed on more recent multitrack analog and digital dates; angular, vibrato-less lines, guttural asides, and sultry, lyrical phrases are all reproduced with stunning naturalism.

Rollins's partners fare nearly as well. In the opener, Johnny Mercer's *I'm an Old Cowhand*, Manne's syncopated wood block lays the foundation for the saxophonist's winsome but swinging reading of the melody, supported by Brown's vinous double bass.

Inevitably, some details betray the vintage of the technology, notably in the slightly muffled timbre of Manne's snare and tom-tom in spots, but on balance the sonics, like the performance, are terrific. Any tape hiss from the original is all but



ROLLINS: The "Way Out West" CD sounds as good as the LP did 30 years ago.

inaudible; at normal playback, vanishingly low noise floor duplicates the quality of true digital-to-digital CDs.

Mobile Fidelity's premise is that well-produced analog masters can rival digital works when properly transferred. On the strength of this astute candidate (which is highly recommended regardless of configuration), the Original Master line will probably enjoy a high-end niche in the CD market.

—SAM SUTHERLAND

WILLIAM ACKERMAN: Passage.

William Ackerman, producer. WINDHAM HILL WD 10114 (fully digital Compact Disc). LP: SP 10114.

Guitarist William Ackerman makes audiophile reproduction a focal point of his record label, and this 1981 work by Windham Hill's founder marked his first experiment with digital recording. Given his success in achieving high-quality LP pressings, and the release history of "Passage" in both conventional and half-speed mastered formats, it's not surprising that the CD exacts only modest gains. If anything, it is surprising that any improvements were made at all, apart from the expected elimination of surface noise.

These evocative chamber pieces pair Ackerman's distinctive acoustic steel-string guitar with violin, English horn, cello, and piano. This intentionally spare aesthetic clearly dramatizes the Compact Disc's reliable strengths in dynamic range and signal-to-noise ratio, while raising such subtler questions as the new technology's propensity for tone coloration. There are

moments in which Ackerman's chiming, bell-like guitar sacrifices some of its ambience, but overall the digital version benefits. At moderate volume (and few listeners are likely to play Windham Hill's introspective music much louder), the "Passage" CD achieves the illusion of a palpable, live performance in your living room.

—S.S.

JAMES INGRAM: It's Your Night.

Quincy Jones, producer. QWEST 23970-2 (analog recording; digital Compact Disc). LP: 23970.

JEFFREY OSBORNE: Stay with Me Tonight.

George Duke, producer. A&M CD 4940 (digitally mixed analog recording; digital Compact Disc). LP: 4940.

Thus far, it appears that the high cost of Compact Disc hardware is prompting record companies to restrict their offerings to the classical, jazz, pop, and rock music favored by the system's first, upscale customers. Black and country releases, limited to crossover material, are still in comparatively short supply.

These two contemporary black albums illustrate that strategy. Both exemplify the recent resurgence of lush, romantic modern r&b, as well as the emergence of a new generation of male vocalists who blend contemporary funk and dance music with a shrewdly updated, courtly persona. Both James Ingram and Jeffrey Osborne are sexually knowing, even slyly boastful, yet far removed from the down 'n' dirty explicitness of hard funk. Producers Quincy Jones and George Duke achieve adroit

For additional reviews of Pop and Jazz recordings, see BACKBEAT.

stylistic syntheses with silky string arrangements, nimble rhythm sections, and rich backing vocals.

For Ingram's debut, Jones's only departure from his characteristically expansive productions is a subtle one—a slight shift toward keyboards and away from guitars and horns, consistent with Ingram's own keyboard-based writing. There are still plenty of brassy workouts, like the vivacious *Party Animal* and the big band-inflected *One More Rhythm*, which features a guest appearance by Jimmy Smith on organ. On the album's high point, the moody, urgent gospel of *Yah Mo B There*, the clarity of the CD is dramatized in the arrangement's darkly compelling electronic keyboards, especially the elastic, synthesized bass.

Osborne's "Stay with Me Tonight," the former LTD lead singer's second solo effort, shines as a CD. Producer Duke gives the transfer an added edge, since the original album was digitally mastered. Separation, signal-to-noise ratio, and imaging are all first-rate, with Osborne's fluid, virile tenor reaping greater presence. The propulsive title track rides a hard-edged, syncopated rhythm arrangement that sounds freshly detailed, but Osborne's creamier ballads are also showcased handsomely. —S.S.

KEITH JARRETT: The Köln Concert.

Manfred Eicher, producer. ECM 810067-2 (analog recording; digital Compact Disc) LP: ECM/WARNER BROS. 2-1064 (two discs).

PAT METHENY: 80/81.

Manfred Eicher, producer. ECM 815579-2 (analog recording; digital Compact Disc) LP: ECM/WARNER BROS. 1180 (two discs).

For more than a decade, Manfred Eicher's pristine chamber jazz recordings have represented a technical as well as musical achievement. He has stressed purity and spaciousness, consistently striving for immaculate master sources and the cleanest pressings and tape transfers. Detractors have found the results occasionally sterile, but no one has ever accused Eicher or ECM of technical laxness.

Although the label has released fine digital recordings, both "The Köln Concert" and "80/81" are derived from analog masters. Whatever additional tape noise the latter route incurs is minimal, however, in keeping with Eicher's emphasis on a more straightforward, classically influenced production style (i.e., no extramusical fireworks). More notably, ECM has taken pains to exploit the longer playing times possible on Compact Disc by creating edited versions of double sets.

"The Köln Concert," Keith Jarrett's most popular solo work to date, documents a 1975 German performance by the pianist. Captured at his most lyrical, Jarrett shifts

seamlessly from skeletal gospel riffs to airy, impressionistic musings and sudden chordal abstractions. The minimal tape hiss is masked by the acoustics of the performing space; the only technical flaw is the slight harshness of a few upper register notes. On balance, however, it's a gorgeous recording that retains its ambience in CD.

Pat Metheny's ambitious "80/81" is arguably a greater compromise, since about 20 minutes had to be cut from the original program, compared with the six-minute encore deleted from Jarrett's set. But the result is still an impressive CD, thanks to Eicher's meticulous studio production and the empathetic support of Charlie Haden's soul-deep acoustic bass, Jack DeJohnette's superb drumming, and the tenor saxophones of Dewey Redman and Mike Brecker.

When originally released, "80/81" was a timely reminder that Metheny is much more than a fusion stylist. He shifts away from the liquid electric guitar orchestrations of group recordings to probe a more improvisational attack. And his choice of partners brings stronger elements of free jazz and bebop to the proceedings. —S.S.

SQUEEZE:

Singles—45's and Under.

Various producers. A&M CD 4922 (analog recording; digital Compact Disc) LP: 4922; reviewed 3/83.

The emphasis of pop anthologies on hits allows record companies to expand the number of artists available in Compact Disc without releasing multiple albums—an important consideration, since limited manufacturing capacity still entails long lead times before delivery of finished discs. But assembling such packages usually requires an extra tape generation in transferring selections from several masters. The added noise and distortion, however incremental in the context of an analog LP or cassette, may be dramatized by the higher signal-to-noise ratio and lower distortion characteristics possible in CD.

Although variations in the noise level and overall ambience are audible here (as they are in the LP and cassette versions), this tribute to the late, great Squeeze still notches slight gains in CD. The music itself is so strong that most fans will forgive minor sonic glitches in return for the format's greater durability: These songs are narcotic enough to invite countless spins.

Songwriters Glenn Tilbrook and Chris Difford combine sharply detailed lyrics and strong melodies with deceptively uncluttered arrangements. The band uses electronic keyboards sometimes, as on their first single, *Take Me I'm Yours*, but their penchant for sunny, Beatle-browed melodies and classic rock guitar insures a more timeless style. Most familiar are the modified soul stylings of *Tempted* and *Black Coffee in Bed*, but lesser-known gems



SQUEEZE me: Tilbrook (top) & Difford

like the final single, *Annie Get Your Gun*, and the upbeat yet heartbreaking *Up the Junction* are equally compelling. If only there had been more singles, "45's and Under" could have exploited the CD's longer playing time. —S.S.

TALKING HEADS:

Speaking in Tongues.

Talking Heads, producers. Sire 23882-2 (analog recording; digital Compact Disc) LP: 238831-1; reviewed 9/83.

The title of this 1983 album is tinged with a gentle irony, for "Speaking in Tongues" is actually more lucid and less fevered than its two predecessors. Leader David Byrne's vocal persona strikes many of the same frenzied postures, but a drier wit and underlying tenderness are also in greater abundance. The pared-down arrangements—which strike a deft balance between the minimalism of the original trio and the sinuous, richly detailed funk of the augmented late '70s ensemble—provide ample opportunities for the Compact Disc medium to display its virtues.

Sinewy guitar and synthesizer lines, many of them played by guests Wally Badarou and Bernie Worrell, gain a bit more presence. The bristling, acoustic introduction to *Burning Down the House*, the memorable hit single, emerges with even greater port, followed by the clattering entry of drums and percussion. Here, as elsewhere, the mix emphasizes the intricate cross-rhythms set up by the band

For additional reviews of classical recordings, see *Classical Reviews*.

and visiting percussionists, and CD's superior separation enhances that aspect. Any flattening of the stereo image is minimized by this expansive scheme, too.

—S.S.

CLASSICAL COMPACT DISC

MOZART:

**Concertos for Violin and Orchestra, in D:
No. 2, K. 211; No. 4, K. 218.**

Anne-Sophie Mutter, violin; Philharmonia Orchestra, Riccardo Muti, cond. [John Mordler, prod.] EMI CDC 47011 (fully digital Compact Disc). LP: DS 37904

BACH:

**Concertos for Violin and Orchestra: in E,
BWV. 1042*;**

**in A, BWV. 1041*. Double Concerto for
Two Violins and Orchestra, in D, BWV. 1043*†.**

Anne-Sophie Mutter* and Salvatore Accardo†, violins; English Chamber Orchestra, Salvatore Accardo, cond. [John Mordler, prod.] EMI CDC 47005 (fully digital Compact Disc). LP: DS 37989

Why is Mozart so hard—not for violinists (Anne-Sophie Mutter does just fine here), but for so many of today's conductors? Could it be they've been scared by all the Olde Musicke Academies? Since the advent of performers like Christopher Hogwood, and their associated scholarly hit-men, nearly every modern-instrument Mozart performance I've heard has sounded timid and cowed. In a word, skittish.

It's as if a generation had gone to music school only in time to learn that the performances they'd grown up on were Very Naughty, but before a solid *new* tradition had taken hold. (Or at least had percolated down—Hogwood certainly isn't scared!) They learned to furlough a few of their players until the Bruckner symphonies, start the trill on the right note, and listen to the scholars on matters of appoggiaturas and bowing. But their hearts weren't in it. They couldn't get in tune with this new approach, and so they lost touch with Mozart as well. When it comes to Mozart, our thirty-to-fifty-year-old conductors are a lost generation, as if they'd been banished to the provinces by the Cultural Revolution.

What Riccardo Muti offers here amounts to chunky phrasing, sluggish andantes (Muti needs lessons in nimble), passages that chug instead of bounce, and some audible sweating over lugubrious "expressive" effects that seem less felt than applied, like graffiti. This is spray-can Mozart.

It wasn't always so hard. From my own haphazard shelf I found a whole new world (old world?) in just the first few bars of the Fourth Violin Concerto with David Oistrakh, playing and conducting for Angel. Even more buoyant are Henryk Szeryng and Alexander Gibson on Sequenza in the Second Concerto. (Perhaps the real measure of what's wrong here is that Oistrakh's comparatively unschooled conducting trounces Muti's far more than his playing

overshadows the young Mutter's.)

Sonically this Mutter/Muti coupling has had a checkered history, coming out first on conventional LP, then (in England, at least) on EMI's first Direct Metal Master pressing, and now on CD. The sound on all three is similar, but just definably different. Although this was the first DMM in my experience that did not significantly improve on its conventional pressing, it did offer a bit more presence to the orchestra

and less inner-groove distortion. Both it and the CD have a less detailed solo-violin sound, though on CD the violin is surrounded by a shade more air. (Mutter's attacks in particular are fuzzed, those precise distinctions between legato and staccato that define Mozart phrasing vaguer than on LP.) CD partisans will no doubt insist I'm just partial to the extra distortion that vinyl imposes, but despite CD's many virtues, I've always heard a slight loss of

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detail on solo strings (compared to a good LP front end). There's less of the burr of horsehair and rosin that Peter Goldmark was trying to capture when he invented the LP.

In no version is Muti well served by his engineers, who (as in his sad *Orfeo*) exaggerate his worst tendencies, making already lethargic andantes sound even woolier. Mozart's writing for oboes and horns—sparing, crucial—is all but lost, while massed strings, particularly on rising phrases, have that digital edge that should be avoidable with a thinned-down band.

But it is Mutter herself who suffers most. Her tone is thin and watery (which it emphatically is *not* in live Mozart) and disfigured by an odd kind of jitter, somewhere between an inhumanly rapid vibrato and outright flutter. A pity, too, because her performance here is agile, fleet, and bouncing, holding its own against any

The Bach music presents fewer questions. It is Bach in a style one might call Romantic-Ascetic. The basic approach is rich and heavy, of a sort one could have heard 30 years ago, but within that old-fashioned frame Salvatore Accardo and Mutter allow themselves few liberties. This is nose-to-the-grindstone Bach, committed, intense, with a rather relentless allegiance to the Serious elements—the two are *never* playful. (The E major *all* sounds like C sharp minor).

Again it took only a few seconds of comparison (the first three chords of the E major by Jaap Schröder and Hogwood) to be reminded that these pieces can indeed be springy, buoyant, at moments even jocular. If a period-instruments comparison seems unfair, a similarly old-line aesthetic does not prevent Isaac Stern and Shlomo Mintz moments of nimble play on Deutsche Grammophon's Huberman Festival recording, and with a far greater sense of the sheer pleasure these works can give.

The ponderously resonant, edgy sound of the Compact Disc is nearly indistinguishable from the LP, although again the CD seems to offer a shade more air around the soloists, in trade for a touch less string detail. —THOMAS W. RUSSELL III

WEILL:

The Unknown Kurt Weill.

Teresa Stratas, soprano; Richard Weitach, piano. [Eric Saltzman, prod.] NONESUCH 79019-2 (fully digital Compact Disc). LP: D 79019, reviewed 2/82. Cassette: D1 79019.

Nannas Lied; *Complainte de la Seine*; *Klops-Lied*; *Berlin im Licht*; *Song*; *Und was bekam des Soldaten Weib?*; *Die Muschel von Margate*; *Petroleum Song*; *Wie lange noch?*; *Youkali*; *Tango Habanera*; *Der Abschiedsbrief*; *Es regnet*; *Buddy on the Night-shift*; *Schickelgruber*; *Je ne t'aime pas*; *Das Lied von den braunen Inseln*.

An appealing collection, and how especially welcome on Compact Disc, far from the maddening *Boheros* (four, as of March) and *Four Seasons* (six) that bulk up so many companies' offerings at a time

when a lone CD purveys Schubert songs.

With texts that stretch from Leon Feuchtwanger to Oscar Hammerstein II, Nonesuch's collection highlights Weill's range. For a composer whose best-known work seems so unmistakable—a bar or two of piano lead-in will place most of *The Threepenny Opera*—Weill had a curious streak of the chameleon. It wasn't so much his ability to conjure up wildly different



KURT WEILL: a fox, or a hedgehog?

moods as a willingness to submerge himself, like Shakespeare's "dyer's hand," in already established idioms. If his deepest ambitions lay in extending the genius of his native Berlin cabaret, one senses here his almost perverse pleasure in working on shores far from home, from the war-bond rally jingoism of Howard Dietz's *Schickelgruber* to the convincingly Gallic *Complainte de la Seine* and *Je ne t'aime pas*, two songs the Little Sparrow herself might have felt comfortable with.

Still and all, there's no mistaking Weill's native accent whether in the frankly self-cannibalizing *Der Abschiedsbrief* or the more masterly *Nannas Lied* and *Und was bekam des Soldaten Weib?*—both to texts by Brecht. If his most basic bag of tricks is no bigger than Cole Porter's, why should it have been? Weill proved his foxlike qualities often enough; who cares if he preferred to stay a hedgehog?

Characteristic Weill tricks include his attraction to strophic songs, particularly

those with refrains, with verses that keep repeating the same setup, changing only their predicates: The soldier sends his wife a hat from Amsterdam/Belgian lace/etc. The kicker in the last line of that song—his final gift is a widow's veil—elicits another echt-Weill effect: A refrain or a last line will often be set with a melting lyricism that ironically underscores the bitterness of what the verses tell us.

Teresa Stratas applies her bewitching talents skillfully to each song. If she seems less at home than the composer's widow in those few moments of *Sprechstimme*, surely the rest could never have been better *sung*. Perhaps surprisingly, for such a renowned Lulu, it is the bittersweet lyricism of so many of these songs that seems most congenial. Stratas's line-by-line characterization is masterly too, subtly varying the mood of each increasingly pessimistic verse of *Nannas Lied*, or conveying in another song the singer's failing attempt to convince herself that *Je ne t'aime pas*. Yet she can encompass as well the enthusiastic anger of a protest work like the *Petroleum Song* and the fatal rhythm of *Und was bekam des Soldaten Weib?* (The everywhere excellent Richard Weitach is particularly helpful on the latter, his piano suggesting not just the soldier's marching tread but the more monotonously fatal rhythm of the woman's life.) Song by song, Stratas is splendid, even thrilling.

If there is any reservation to be made, it is only that she doesn't go much beyond that. The highest traditions of French and German cabaret singing involve less the re-creation of a song than the new-creation of a character. Listening to the best in that tradition, you're struck by the singer's evocation of a new persona for each song, a particular character who seems to exist beyond the borders of the song. It's that mystical suggestion of a slice-of-the-infinite that's missing here. Still, that is to demand the preternatural as a matter of course. Stratas acquits herself admirably and honorably.

The same, alas, cannot be said of Nonesuch. To issue a Compact Disc—at current inflated prices—with *no* texts or translations, and sans Kim Kowalke's splendidly useful LP notes, is simply a scandal. Surely a postcard telling us we can send for them? Not even for ready money. [Nonesuch advises that a free copy of the texts and notes can be obtained by contacting its Consumer Dept., 9229 Sunset Blvd., Los Angeles, Calif. 90069, telephone (213) 205-7400.]

On the other hand, as one who is at best an agnostic on CD, I have to say that the sound here is gorgeous: achingly sweet, positioned in space with an absolute solidity few cartridges can match. The LP is a shade edgier, the CD just that degree smoother to fully justify the increased price. If only there were notes . . . —T.W.R. III

A Pride of Sopranos

Reviewed by Paul Hume



Jessye Norman (left) and Barbara Hendricks: imposing voices in concert and on disc

New recordings by Jessye Norman, Barbara Hendricks, and Eva Marton showcase the talents of a rising generation.

WASHINGTON AND NEW YORK were fortunate, in the second week of this year, to hear two distinctive and distinguished artists. Jessye Norman and Barbara Hendricks, singing together in the Second Symphony of Mahler. Each made a profound impression, giving unusual dimension to the vast concept projected by the conductor, Leonard Bernstein. Hendricks was the soprano, and Norman sang the mezzo lines with almost indescribable effect.

The two are just slightly more than three years apart in age; each has taken her own good time to reach the position of eminence she occupies today. It is rare for any concertgoer to hear them singing together. But because of that felicitous conjunction in January, it is of special interest to take up two new recordings from Norman and one

from Hendricks at the same time.

Norman's voice is by far the larger, the more spacious in size and resonance. For her operatic debut in 1969 in West Berlin, the Germans called her a "jugendlich" ("youthful") dramatic soprano and properly cast her as Elisabeth in *Tannhäuser*. In the intervening years, Norman has divided her time between opera, concerts, and orchestral engagements. Her roles have included Aida, Selika, Mozart's Countess, and both Cassandra and Dido in *Les Troyens*, the work in which she made her Metropolitan Opera debut in the fall of 1983.

Today her voice must be described as a genuine dramatic soprano, but one with so impressive a lower register that she is completely comfortable in mezzo territory; it is even fascinating to speculate on how she would sound as Erda. Clearly this is the kind of voice Richard Strauss had in mind when he asked that the first performance of the *Four Last Songs* be given by Kirsten

Flagstad. No other soprano with such amplitude has recorded them since that premiere.

In range—there is only one high B and one high B flat in the four—these songs suit Norman's voice and temperament. Two of them, *September* and *Im Abendrot*, lie within the most lustrous part of her voice, barely covering a tenth, up to the F sharp. But it is the magical, almost mystical spell that these songs cast, with their most mature Straussian interweaving of voice and orchestra, that raises them to the level of his finest writing. The secret of that spell lies in the degree to which the singer clearly projects the beauty of each word in the text. This Norman does very well on her Philips disc—very well indeed. And yet one wishes that she would sculpt the words even more strongly, for they are the key to the meaning of the songs.

Vocally these *Four Last Songs* are pure joy. Norman can soar through the largest, highest phrases without any thought of limitations. But if you listen to them sung either by Elisabeth Schwarzkopf—the earlier or the later recordings—or by Elisabeth Söderström, you hear those ineffable moments that come *as much* from the enunciation as from the singing.

The other six songs on Norman's

Paul Hume is music critic emeritus of The Washington Post and music critic of radio station WGMS.

Strauss collection include some of the finest singing yet heard from this marvelous artist. Try her *Ruhe, meine Seele* if you want to hear something of the sound she projected in the Mahler symphony as she sang "O Röschen roth!" The opening *Cécilie* is sometimes a problem when sung with orchestra; it almost seems that there are too many instruments to permit the singer the kind of headlong impetuosity the poem requires. In this case, too many phrases linger when they should leap. *Morgen!*, on the other hand, gains something very precious when the violin plays that long, sustained solo, which cannot be held by the ear in the same way when the piano alone has the task.

This record makes you want to hear Norman in those Wagner roles for which she, like Flagstad at the same age, is now ready. It is bound to happen. Strange footnote to this recording: The texts of the *Four Last Songs* are printed on an insert in German, but a note says, "Permission to print English and French translations could not be obtained." Six other recordings, checked at random, had no such problem.

Because Norman's vocal study included substantial time with Pierre Bernac, it is not surprising that she has sung perhaps equal quantities of French and German literature. Her Erato recording of Chausson's *Poème de l'amour et de la mer* has moved straight to the top of my brief list of favorite recorded performances. It stands there next to the 1977 Gérard Souzay disc, though again there is no comparison if we are going to talk about projecting the text. But the music suits Norman ideally, and she is extremely convincing throughout. The Monte Carlo Philharmonic can sound more involved with another conductor—for instance (and you may be surprised to know that this performance exists), Pierre Monteux, who many years ago conducted a recording of the work with Gladys Swarthout. That is a real treasure in every way!

The *Chanson perpétuelle*, which, with the piano and string quartet, has distinct aural parallels with the *Concert* for Violin, Piano, and String Quartet, is close to ideal in this new recording. The chamber ensemble has a lovely radiance and Norman finds the work right down her alley. Results vary in the songs with piano, well enough played by Michel Dalberto (without effacing any memories of Dalton Baldwin). *Le Colibri*, as Jennie Tourel told one of her somewhat heavy-footed pupils, is about a hummingbird, not a vulture. Norman does not make such a misjudgment, but her voice does not lighten up as it should; we know from much other evidence in Strauss and Chausson that she is capable of exquisite pianissimo lines. This is, however, a welcome addition to the still-slighted repertoire of French songs on records, and a bright signpost on the Norman path of growing artistry.

Barbara Hendricks is a beautiful artist, secure in handling her shining lyric soprano, an instrument she treats with the respect it deserves. She said in a recent radio interview that she would be delighted to sing Zerlina indefinitely but was not at all sure she should ever take on Donna Elvira, though Herbert von Karajan had asked her to. In the kind of modest display too few younger singers are willing to offer, Hendricks said that for her, Schwarzkopf's Elvira is the model—and one that she could never approach. That kind of perceptive musical intelligence is a rare and treasurable gift.

Hendricks is widely known, and rightly, for her astounding recorded performance in David Del Tredici's *Final Alice*, with the Chicago Symphony Orchestra and Sir Georg Solti, as well as her ravishing singing in the C minor Mass of Mozart, under the Karajan baton. She has also released a marvelous disc of spirituals, to which she brings a strongly individual approach.

Her Philips collection of French arias gives you an excellent profile of her voice: easily capable of the loveliest high soft tones and phrases, powerful enough for the larger moments in the Mirror Scene from *Thaïs* and the climax in "Depuis le jour." But the longer you listen to this record, the more you may be disturbed by several recurring difficulties. First of all, the French enunciation is both highly unsatisfactory and unclear. For example, the first word in the recitative leading up to Manon's "Adieu" is "Allons!" Try as often as I might, I never heard the slightest suggestion of the word. An even more troublesome fault is that Hendricks, clearly a singer whose teachers insisted that she avoid the vowel *ee* in any of its manifestations, employs a darkening technique that prevents her from singing any French *e*,



Eva Marton: the Brünnhilde of the '80s?

whether mute, accented, or open. This proves ruinous in such words as "belle," "destinée," and so on. Then there are serious technical problems of agility in the demanding aria from *Benvenuto Cellini*, which ends with a disastrously unsuccessful attempt at a high D, though that is a note in which Hendricks is at other times secure.

It is strange that anyone who studied with Tourel should have problems with the French language. These could be remedied if the greatly gifted young singer would seek the assistance of any good coach of singing French. With her voice and instincts, Hendricks should let nothing keep her from clearing up this language hurdle. An artist who insists on restoring Juliette's "Dieu, quel frisson" to Gounod's score, thus giving the character a substance she (Continued on page 89)

STRAUSS: Songs.

Jessye Norman, soprano; Leipzig Gewandhaus Orchestra, Kurt Masur, cond. Philips 6514 322. Cassette: 7337 322. CD: 411 052-2.

Four Last Songs; *Cécilie*; *Morgen!*; *Wiegenlied*; *Ruhe, meine Seele*; *Meinem Kinde*; *Zueignung*.

CHAUSSON: Songs.

Jessye Norman, soprano; Michel Dalberto*, piano; Monte Carlo Philharmonic†, Armin Jordan, cond. Erato NUM 75059. Cassette: MCE 75059.

Poème de l'amour et de la mer†; *Chanson perpétuelle**; *Le Colibri**; *Serenade Italienne**; *La Dernière Feuille**; *Les Papillons**; *Le Charme**.

BARBARA HENDRICKS: French Opera Arias.

Barbara Hendricks, soprano; Monte Carlo Philharmonic, Jeffrey Tate, cond. Philips 410 446-1. Cassette: 410 446-4.

BERLIOZ: *Benvenuto Cellini*; *Entre*

l'amour et le devoir. BIZET: *Les Pêcheurs de Perles*: *Me voilà seule dans la nuit*. CHARPENTIER: *Louise*: *Depuis le jour*. GOUNOD: *Roméo et Juliette*: *Ah! Je veux vivre*; *Dieu, quel frisson*. MASSENET: *Manon*: *Adieu, notre petite table*; *Cours la Reine* scene; *Thaïs*: *Dis-moi que je suis belle*. OFFENBACH: *Les Contes d'Hoffmann*: *Elle a fui, la tourterelle*.

EVA MARTON: The Early Recordings.

Eva Marton, soprano; Hungarian Radio and Television Chorus††; Hungarian State Opera Orchestra‡; Budapest Philharmonic Orchestra†; Budapest Symphony Orchestra***; Andras Korodi †††, cond.; Gyorgy Lehel**, cond.; Ervin Lukacs*, cond. Hungaroton SLPX 12454. Cassette: MK 12454.

BRAHMS: *Requiem*: *Ihr Habt nun Traurigkeit**. LISZT: *The Legend of Saint Elisabeth*: *Elisabeth's Prayer***.

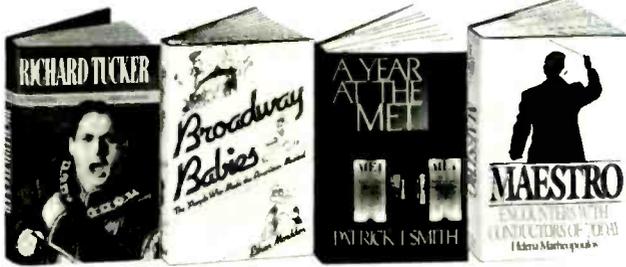
MENDELSSOHN: *A Midsummer Night's Dream*: *Bunte Schlagent*†.

VERDI: *La Forza del destino*: excerpt‡.

WAGNER: *Tristan und Isolde*: *Liebested*°.

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Reviewed by James Wierzbicki

UNLESS THEY LIVE in New York, Boston, Ann Arbor, or Washington, American listeners are likely to get their exposure to first-rate performances of early music primarily through imported recordings. The specialists in Medieval, Renaissance,

and Baroque repertoire who are based in those cities do tour, of course, but only on occasion, for most of them are homebound by obligations to careers as teachers, instrument makers, or (in most cases) free-lancers ready and willing to

serve the cause of music from all periods. Besides, they're as limited in number as they are in mobility: The rosters of Titanic, Pro Arte, Gasparo, Smithsonian, and those few other labels that issue high-quality domestically produced recordings of early music tend to feature the same names, and typically it's the same handful of singers and players who dominate the faculties of the various early music workshops and institutes held around the country. Despite the growing popularity of affairs such as the biennial Early Music Festival launched in Boston in 1981, pre-Classical music is still a cottage industry in America, and it will probably remain so until the current crop of artists spawns at least several generations of able protégés.

How different it is in Europe, where the seeds of interest in early music were planted decades ago. After Arnold Dolmetsch's pioneering work around the turn of the century, the torch was taken up by, among others, Paul Sacher and August Wenzinger, who in 1933 co-founded the famed Schola Cantorum in Basel, Switzerland. The Dutch harpsichordist Gustav Leonhardt is a product of the Schola Cantorum, and it was largely through his efforts in the early 1950s that audiences in the Netherlands began to develop a taste for "authentic" performances of music from the 17th and 18th centuries. English cathedral choirs had long maintained a tradition of "authenticity" in the performance of

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Taverner Consort and Taverner Choir, Andrew Parrott, cond. [John Fraser, prod.] ANGEL S 38044 (digital recording). Cassette: 4XS 38044.

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Ave Maria; Absalon, fili mi; Veni, Sancte Spiritus; De profundis clamavi; In te Domine speravi; Scaramella; El grillo; Mille regretz; Petite camusette; Je me complains; En l'ombre d'un buissonet; Je ne me puis tenir d'aimer; La déploration de la morte de Johannes Oeckeghem (Nymphes des bois).

MONTEVERDI: Venetian Vesper music from "Selva morale e spirituale."

Emma Kirkby, soprano; Rogers Covey-Crump and Nigel Rogers, tenors; David Thomas,

bass; Taverner Consort, Taverner Choir, and Taverner Players, Andrew Parrott, cond. [John Fraser, prod.] ANGEL S 38030 (digital recording). Cassette: 4XS 38030.

Psalm 109: Dixit Dominus; Psalm 110: Confitebor tibi Domine; Psalm 111: Beatus vir qui timet; Psalm 112: Laudate pueri; Psalm 116: Laudate Dominum omnes gentes; Hymn: Deus tuorum militum; Magnificat a 8; Motet: Jubilet tota civitas; Salve Regina a 3.

PURCELL: Fantasies for Viols.

London Baroque. [Gerd Berg, prod.] ANGEL S 38079 (digital recording). Cassette: 4XS 38079.

Fantasies Nos. 1-12 (in D minor, F, G minor, G minor, B flat, F, C minor, D minor, A minor, E minor, G, and D minor), Z. 732-743; Fantasy No. 13, in F, "Upon One Note," Z. 745; Fantasy No. 14, in G minor, "In Nomine No. 1," Z. 746; Fantasy No. 15, in G minor, "In Nomine No. 2," Z. 747.

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BACH, J. S.: "Coffee" Cantata, B.W.V. 211; "Peasant" Cantata, B.W.V. 212.

Rosmarie Hofmann, soprano; Guy de Mey, tenor; Gregory Reinhart, bass; Linde Consort, Hans-Martin Linde, cond. [Gerd Berg and Christfried Bickenbach, prods.] ANGEL S 37994 (digital recording). Cassette: 4XS 37994.

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Critics' Choice

The most noteworthy releases reviewed recently

BACH: Concertos for Oboe, Strings, and Continuo; Concerto for Oboe d'Amore, Strings, and Continuo. Hammer: Bach Ensemble. Rifkin. PRO ARTE PAD 153, Feb.

BACH: Goldberg Variations; Chromatic Fantasy and Fugue in D minor; Four Duets, S. 802-5. Schiff. LONDON LDR 73013 (2), Apr.

BERWALD: Septet for Clarinet, Horn, Bassoon, and Strings, in B flat. JANÁČEK: *Concertino for Horn, Bassoon, Piano, and Strings.* PROKOFIEV: *Overture on Hebrew Themes for Clarinet, Piano, and Strings.* Amsterdam Nonet. NONESUCH 71412B, Mar.

COLGRASS: Déjà vu; Light Spirit. DRUCKMAN: *Aureole.* Starobin; Members of St. Louis Symphony, Comet; St. Louis Symphony, Slatkin. NEW WORLD NW 319, Apr.

GRIEG: Lyric Pieces, Holberg Suite. Katsaris. TELDEC 6.42925, May.

HANDEL: Arias from Rinaldo and Other Operas. Horne; I Solisti Veneti, Scimone. ERA-TO 75047, Feb.

MAHLER: Symphony No. 6, in A minor. London Philharmonic, Tennstedt. ANGEL DSB 3945 (2), Mar.

MASSENET: Manon. Cotrubas. Kraus, Quilico. Van Dam; Orchestra and Chorus of Toulouse, Plasson. ANGEL DSCX 3946 (3), Apr.

MOZART: Requiem. Price, Schmidt, Araiza, Adam; Leipzig Radio Chorus; Dresden State Orchestra, Schreier. PHILIPS 6514 320, May.

PENDERECKI: Te Deum; Lacrimosa. Gadulanka Podles, Ochman, Hiolski; Polish Radio

Chorus and Orchestra. Penderecki. EMI/ANGEL DS 38060, May.

PURCELL: Songs (15). Esswood, Sonnleitner, Medlam. HYPERION A 66070, Mar.

SCHUBERT: String Quintet in C, Op. 163. Schiff; Alban Berg String Quartet. EMI/ANGEL DS 38009, Apr.

SZYMANOWSKI: String Quartets, Nos. 1, 2. Varsovia Quartet. PAVANE ADW 7118, Feb.

WAGNER: Tristan und Isolde. Behrens, Hofmann; Bavarian Radio Symphony and Chorus, Bernstein. PHILIPS 6769 091 (5), May.

WOLPE: Suite im Hexachord for Oboe and Clarinet. Williams, Randall. CRYSTAL S 355, Mar.

NICOLAI GEDDA: Anthology of Swedish Song. BLUEBELL 121, 122, 127, 142, 147 (5), Mar.

CHRISTOPHER HOGWOOD: Keyboard Music. OISEAU-LYRE DSLO 609, Apr.

sacred choral music; the accomplishments of Dolmetsch notwithstanding, it was only in the late 1940s—when the countertenor Alfred Deller made his first recordings—that British audiences in general were reminded of the glories of Elizabethan lute songs and other decidedly secular genres.

The influence of Leonhardt, Deller, and the others was enormous. By the mid-1960s not only they but also a fair number of their emulators were flourishing; today, especially in London and Amsterdam, the public's appetite for pre-Classical music is almost as ravenous as it is for the mainstream repertoire. The number of European early music ensembles currently represented on such labels as Archiv, Telefunken, Oiseau-Lyre, Hyperion, Oryx, Harmonia Mundi, and Das Alte Werk is staggering, and it seems that with each season the community of fully occupied performers expands to meet the ever-growing demand.

Angel's new Reflexe series offers a wide sampling from the current treasure chest of European groups. This is the label's first major early music project since it introduced the work of the late David Munrow and his London Early Music Consort to American listeners in the 1970s. As was the case with the Munrow recordings, the Reflexe discs feature performances that are as musically excellent as they are musically authoritative, and they benefit considerably from painstakingly engineered digital sound and generally meticulous pressings. Every one of them is a treat; taken as a whole they add up to a sonic feast that's indescribably delicious.

Among the initial releases, those that contain the earliest repertoire boast the most intriguing sounds, and not only because the pure fifths and high thirds of the "just"

intonation and mean-tone tuning systems offer such a refreshing contrast to the compromised intervals of 18th-century equal temperament. The Machaut recording is a recreation of the 14th-century *Messe de Notre Dame* as it might have been heard in a functional setting, with the six polyphonic Mass movements intermixed with plainchant from the Feast of the Nativity of Our Lady and the ringing of sacristan's bells at the liturgically appropriate moments. Engineer Neville Boyling's attempt to duplicate the three-dimensional ambience of a conjectural performance in Rheims Cathedral is only partially successful, but the sonics are sumptuous nonetheless, and the clarity of the singing is beautifully complemented by transparent veils of architectural echo.

Josquin's reverential motets and lively chansons for four, five, and six voices are performed in a drier space, presumably comparable to the private chapels and palace ballrooms in which they were introduced in the decades surrounding 1500, and the minimal acoustical resonance allows the ear to focus clearly on the extraordinary musical resonance that results from pure intervals sung with scarcely a trace of vibrato. Paul Hillier's ensemble features several of the finest male soprano and alto voices ever captured on disc, and it's a pity their owners aren't credited in the jacket literature.

Monteverdi's 1640 *Selva morale et spirituale* is a voluminous collection of sacred pieces designed for performance in Venice's spacious St. Mark's Cathedral, but few of them call for the antiphonal choirs favored by resident composers of both earlier and later generations. Thus, even the more complexly scored components (for example, the "Dixit Dominus" for double chorus) of this hypothetical Vespers service are presented without back-and-forth gimmickry, although the engineering (also by Boyling) is keen enough so that a listener can pinpoint in the stereo field

the positions of the soloists and accompanying string players. Castrati being unfashionable these days, the top parts are all taken by women; Emma Kirkby sounds as ravishing here as she does on the famous Christopher Hogwood *Messiah* recording, and the crystalline quality of her voice is shared by the female choristers. This is easily the most luxurious release among the incipient Reflexe offerings, with the music's great timbral, textural, and rhythmic variety proudly served by the soloists' elegant ornamentation and Andrew Parrott's deft balancing of vocal-instrumental forces.

The only one of the new Reflexe discs that has sonic flaws is the Purcell collection. The performances by the members of the group called London Baroque are superb, and the glistening sonorities of these affectionately bowed viols deserve to be framed in absolute silence. However, an intrusive rumble filters into all the between-cut spaces, and on the second side a few of the final cadences dissolve into a vapor of high-pitched noise that is definitely not coming from the harmonics of a still-vibrating string.

There's noise, too, on the two records of the C. P. E. Bach package, but in this case it's simply the percussive pitter-patter that results from close miking of the harpsichord. Bob van Asperen's Melante '81 Orchestra is new to the early music scene in Holland. His string players take a moderate approach to tone production, with the gently swelling bow strokes one associates more with the British ensembles than with the established Continental groups. Their sound is vibrant and their playing vigorous, just right for supporting the impeccably clean virtuosity of their leader. Trevor Pincock and his English Concert recorded No. 5 of the 1772 *Hamburg* set a few years ago (Vanguard 71265), but the other concertos are scarcely known on this side of the Atlantic. The harmonic content is rather straightforward but they're loaded with

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engaging melodies and ear-catching dynamic effects, and doubtless at least a few of them will become standard concert fare as soon as the long-anticipated C. P. E. Bach renaissance gets underway.

Of the Basel-based Linde Consort's two J. S. Bach albums, the more impressive is the one containing the Suites for Orchestra. The balances are inevitably right, and Hans-Martin Linde's flute solos in the B minor Suite have a self-effacing innocence about them that belies the part's technical difficulties. There's fine flute playing to be heard on the cantata disc, too, but like the voices it seems to be thrust into the foreground in a way that calls attention more to the performer than to the music. In any case, the singing is vivacious, joyous, and witty, enjoyable as much for its theatrical innocence as for its musical finesse.

The Reflexe jacket material is inconsistent. Specific information regarding instruments and personnel is given for the Monteverdi and C. P. E. Bach collections, but not for the J. S. Bach sets; members of the Hilliard Ensemble are not named; on the concerto and cantata albums credit is given to the translator but not the author of the liner notes.

Those quibbles aside, this is an extraordinarily good series. Collections of Dunstable motets, Renaissance music from Naples, and lute pieces from the 16th and 17th centuries are forthcoming, and one hopes there will be many more releases after that.

BARBER: Concerto for Cello and Orchestra, Op. 22. SHOSTAKOVICH: Concerto for Cello and Orchestra, No. 1, Op. 107.

Raphael Wallfisch, cello; English Chamber Orchestra, Geoffrey Simon, cond. [Brian Couzens, prod.] CHANDOS ABRD 1085 (digital recording). Cassette: ABTD 1085.

We have a problem with the cello concerto, but who is the most to blame? Conductors? Audiences? The cellists themselves? Surely the blame must rest with today's conductors, those high priests who appear to believe that there are but three or four cello concertos worth presenting to the public. A case in point: When André Previn devised his British Festival a couple of seasons ago, he brought Yo-Yo Ma forward for yet another performance of the Elgar Concerto, when this same cellist is, to my knowledge, the only current performer of the very neglected Finzi Concerto, another British work that is at least the equal of the Elgar. Such are our tired concert patterns today.

Thus, there is ample reason to welcome this disc, which should serve to remind us (and conductors) that the Barber Concerto is worth many more performances than it currently receives. Even if it must be said that the work is not the equal of Barber's Piano Concerto (few twentieth-century concertos for any instrument are) nor

even of his Violin Concerto, it will nonetheless be a major treat for anyone unfamiliar with it.

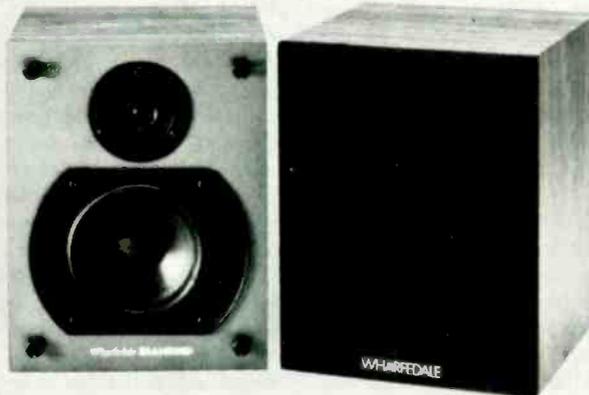
This concerto has been recorded twice before. I have not heard the Raya Garbousova performance for a long while; however, after a careful comparison with the Zara Nelsova recording (conducted by the composer himself), this new version is roughly equal to that one, but with far better sound. That is really what tips the scales in its favor, as well as the wonderfully sympathetic and acutely sensitive collaboration by Geoffrey Simon and the English Chamber Orchestra. The soloist, Raphael Wallfisch,

is nothing less than a major new talent. All the more credit to him, then, for exploring fresh repertoire, as he and Simon also did in their recently released all-Tchaikovsky recording, also on Chandos.

Finally, but hardly least, the somewhat more frequently played and recorded First Shostakovich Concerto receives a performance of at least equal voltage to any other, and that includes the account by Rostropovich. In fact, I also prefer this version to the two others I know, namely those by Miloš Sadlo (on Supraphon) and Mikhail Khomitsner (on a deleted Melodiya/Angel).
THOMAS L. DIXON



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CUMMING: Cycles and Songs.

Donald Gramm, bass-baritone; Carole Bogard, soprano; Richard Cumming, piano; Beth Orson, oboe; Theodore Mook, cello. [Charles Fisher, prod.] CAMBRIDGE CRS 2778 (digital recording).

LA MONTAINE: Wilderness Journal.

Donald Gramm, bass-baritone; Paul Callaway, organist; National Symphony. Antal Dorati, cond. FREDONIA DISCS FD 11. Cassette: FDC 11. (3947 Fredonia Drive, Hollywood, Calif. 90068.)

There is a bittersweet nostalgia in listening to recordings dominated by the voice, and the often quite magical art, of the late Donald Gramm. The "bitter" is the sorrow at the unexpected death of this rare artist in the summer of 1983, when he was fifty-six years old and very much at the peak of his long and eminently successful career. He had been enjoying seasons of singing Don Alfonso with the Metropolitan Opera and Falstaff at Glyndebourne (as well as in Boston), and he was preparing to record Nick Shadow in *The Rake's Progress*. A fatal heart attack ended that career.

The "sweet," however, is the realization that Gramm can be heard on various recordings in some of his finest moments, illustrating all that made him outstanding on the recital stage and in the opera house. With Glenn Gould, he recorded the two dramatic songs that are Arnold Schoenberg's Opus 1. With Beverly Sills and Sarah Caldwell, his longtime colleagues, he recorded Donizetti's *Don Pasquale*. And in Leonard Bernstein's *Songfest*, Gramm's singing of the Whitman poem *To What You Said* is the breathtaking moment of the wonderful score.

John La Montaine wrote *Wilderness Journal* in 1969 and 1970 on commission from Catherine Filene Shouse, who asked the Pulitzer Prize composer for a work with which to inaugurate the Aeolian-Skinner organ she was giving to the Kennedy Center. For a text, La Montaine turned to the writings of Thoreau and created a symphony for large orchestra, bass-baritone, and organ. The piece was heard for the first time during the Kennedy Center's inaugural season, in the fall of 1971. It is from tapes made at that time that this recording has at last been pressed. The intervening years were spent in securing the necessary permissions from conductor Antal Dorati (then music director of the National Symphony), the musicians, and the soloists.

Of his singing in the *Journal*, Gramm told La Montaine, "I have never heard so rich and varied a recording of my singing." And it is true, as the music takes him through three quarters of an hour of excerpts from Thoreau's essays and journals. The language seems to call for precisely Gramm's style and sound: "I thank you, God. I do not deserve anything, I am unworthy of the least regard; and yet the world is gilded for my delight and holidays are prepared for me." The full Thoreau text



Michael Haydn (1737-1806)

accompanies the record.

Gramm's voice is elegant, flexible, and impressive at every point. So is the playing of organist Paul Callaway, for whom the solo keyboard part was designed. There are some formidable passages, together with some imaginative bird music for the organ and throughout the orchestra. Interestingly, with the organ and the bird calls, there is still no close parallel with Olivier Messiaen's use of both of these. For Callaway—who was, at the time of the recording, still in his 39 years as organist of Washington Cathedral—formidable passages were no hazard. The organ has, in the recording, a somewhat more reedy sound than it presents live in the hall, and there is a compressed sound that is not heard in the Center. But the music is of striking beauty, evoking nature in many moods, out of orchestral writing that changes as quickly as waving reeds on a marshy strand or birds flashing through a western sky at sunset. It is good to have so distinctive a work presented in this manner. Had Dorati taken a larger, more intense approach, rather than a somewhat constrained view, the orchestra would have achieved a greater tonal luster than can be heard here.

Throughout his long career, Gramm was one of those rare creatures who loved the song recital and worked to keep it alive and kicking in an era when it was steadily being eroded both by composers who looked down on the writing of songs and by the willingness—nay, the insistence—of concert managers to engage opera singers for recitals that turned into periods of opera with piano.

Soprano Carole Bogard will forgive me for having spent so much time talking about Gramm, with whom she shares the other recent release. It is a recording of 20 songs by Richard Cumming, whose name you may or may not know, but whose music you should hear. (Lovers of the piano might be interested in John Browning's Desto

recording of Cumming's 24 preludes.) Cumming has a true gift for the writing of songs. The cycle in which he joins Gramm as pianist was written for the singer in 1963. Called *We Happy Few*, it draws on ten different writers, ranging from the opening Shakespeare through an Egyptian who lived around 3000 B.C., and up to Rainer Maria Rilke and Archibald MacLeish.

The poems reach out for your attention, especially because you can easily understand every syllable of Gramm's singing, which is richly varied to match the changing moods. Choose your own favorites from these ten, nearly all of which prove to be real gems. Cumming is an expert pianist in the manner of Poulenc and Rorem, and the balance is ideal.

On the other side of the record Bogard sings one duet with Gramm and nine songs on her own, again with Cumming as the pianist. In one song she is joined by oboist Beth Orson, in another by cellist Theodore Mook. Like Gramm, Bogard has always been a distinguished singer of songs. She probes the meaning of the poems and then seduces you with the lovely sounds she makes. The songs cover more than two decades in Cumming's creative career. If the song recital is making a comeback, as seems possible, these songs should be widely heard. Audiences would love them.

Jacket notes by Ned Rorem rise far above the caliber of notes usually provided. His perceptions, his own involvement with the writing of some of this country's best songs, and his wit make the essay a joy. Texts are not included, but you never need them while listening to Gramm, not often with Bogard.

PAUL HUME

HAYDN, M.: Symphonies: No. 19, in C, P. 10; No. 23, in D, P. 43.

Bournemouth Sinfonietta, Harold Farberman, cond. [Antony Hodgson, prod.] TURNABOUT D-TV 34902. Cassette: D-CT 4902.

HAYDN, M.: Symphonies: No. 21, in C, P. 12; No. 37, in B flat, P. 28; No. 41, in F, P. 32.

Bournemouth Sinfonietta, Harold Farberman, cond. [Antony Hodgson, prod.] TURNABOUT D-TV 34903. Cassette: D-CT 4903.

No less a musician than Wolfgang Mozart thought highly of Michael Haydn. In 1763, when Mozart was still a child, Haydn assumed a position at the archbishop's court in Salzburg, where he was responsible for composing new works as well as directing the orchestra. Thus the younger brother of Joseph Haydn began a 40-year tenure in Salzburg, during which the Mozarts (both Wolfgang and his father Leopold) got to know and respect him. Several incidents illustrate the closeness of Wolfgang's relationship to Michael, of which one is relevant here: In 1783 Mozart wrote an introduction to and performed a Michael Haydn symphony. For decades scholars thought

the entire work to be by Mozart, and it was listed in Mozart catalogs as Symphony No. 37 (K. 444).

The fact that the younger Haydn's music was of sufficient quality to make such confusion possible says a good deal for this underrated composer. And judging from the five symphonies recorded here, it seems that Mozart's high estimation was not unfounded. Though these works never attain the lyric poignancy and chromatic richness of Mozart's nor the humor and daring originality of Joseph Haydn's, they are competent, often exhilarating, sometimes moving.

Each of these discs contains one work from the 1770s. Symphony No. 19 (P. 10; the P numbers refer to Lothar Perger's catalog) was composed in 1773 and is notable for an odd instrumental blend that includes screechy little piffaros (shepherd's pipes) and rough, strident *tamburi*. The other work, Symphony No. 21 (P. 12), is less distinguished. Interestingly enough, both compositions seem more polished, suave, and ultimately more commonplace than many of brother Joseph's symphonies of the 1770s; there is none of his bizarre imagination, stormy emotion, or manic wit.

The remaining three symphonies date from the 1780s. Symphony No. 23 (P. 43) has a fugal finale whose subject begins with four long notes—a close relation to the theme of the finale of Mozart's *Jupiter* Symphony. (As a matter of fact, Mozart was quite taken with Haydn's fugal finales, and even copied a section of this one for study.) Symphonies No. 37 (P. 28) and No. 41 (P. 32) are among Michael's last and display new advances in orchestration (especially in the prominence of the winds) and a confident control of thematic development.

The symphonies from the 1770s are in four movements, while those from the 1780s are in three, lacking a minuet. First movements have vigorous first themes and lyric, clearly contrasting second themes (in this respect Haydn is closer to Mozart than to his brother Joseph). The slow movements are really the only places where Michael realizes the solo potential of the winds: a pair of English horns in No. 19, a solo oboe in No. 21, solo oboes and bassoons in Nos. 37 and 41. The finales, except for the fugal one, are sparkling, uninhibited rondos (much like those of the elder Haydn).

The performances by the Bournemouth Sinfonietta, under the inspired leadership of Harold Farberman, are nearly perfect. The small ensemble plays cleanly with contagious enthusiasm; the strings favor a light, crisp spiccato style, while the wind attacks are feathery and precise. Tempos are brisk, and an imaginatively realized harpsichord part adds to the pleasure. Furthermore, the quality of these recordings is surprisingly good, indicating the success of Turnabout/Moss Music Group's effort to

upgrade their product. Though there are occasional bouts of surface noise, the pressings are generally commendable, and the digital sound is rich and well balanced. At their budget price, these releases belong in the library of all devotees of 18th-century music.

K. ROBERT SCHWARZ

LASSUS: Requiem for Four Voices.

Pro Cantione Antiqua, Mark Brown, dir. [Edward Perry, prod.] HYPERION A 66066 (digital recording) (distributed by Harmonia Mundi USA, 2351 Westwood Blvd., Los Angeles, Calif. 90064).

In the rush to celebrate the anniversaries of

Stravinsky and Haydn in 1982, a significant birthday was overlooked—that of Roland de Lassus (Orlandus Lassus), who was born in Mons in 1532. Enough ink was spilled in drawing specious parallels between Haydn and Stravinsky, so I will not attempt to complete the triangle with Lassus. It is sufficient to say that he stands with Palestrina and Victoria as one of the great masters of Renaissance polyphony.

His masses, most experts say, are not his best or most typical works. Perhaps not, but the fervent *Requiem* for four voices bears comparison with settings of the same text by Lassus's most distinguished con-

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temporaries, and the modern listener may find it all the more appealing for its simplicity. Unlike the majority of Lassus's mass settings, it is based on plainsong, sometimes paraphrased, sometimes treated as cantus firmus. The starkness of the Gregorian Mass for the Dead permeates the setting.

In some of its previous recordings, Pro Cantione Antiqua stretched a point by performing Renaissance motets and masses with men's voices only, but in this case the low-lying and closely woven parts admirably suit the ranges of countertenor, tenor, baritone, and bass. There is little historical

justification, however, for performing this music with one singer on a part: A contemporary depiction of the Bavarian court chapel, where Lassus was Kapellmeister, shows a sizable group, and the choir books preserved in the Bavarian State Library carry, in Lassus's own hand, the names of two and three singers per part. But so flawless is the ensemble's blend and intonation here, and so sympathetic the acoustics, that one need not wish for more. The group's declamation is clear and passionate, though its adoption of the conventional Italianate pronunciation of the Latin is surely out of place.

The inclusion of the plainsong tract and sequence sets the polyphonic portions in context and makes the four-voice writing sound extraordinarily grand; the plainsong "In paradisum," from the rite of Absolution of the Dead, is a welcome lagniappe. The recording is pleasingly reverberant without loss of focus. MICHAEL FLEMING

MOZART: Opera Arias.

Lucia Popp, soprano: Munich Radio Orchestra. Leonard Slatkin, cond. [Theodor Holzinger and Gerd Berg, prods.] EMI/ANGEL DS 38023 (digital recording). Cassette: 4XS 38023. CD: CDC 47019.

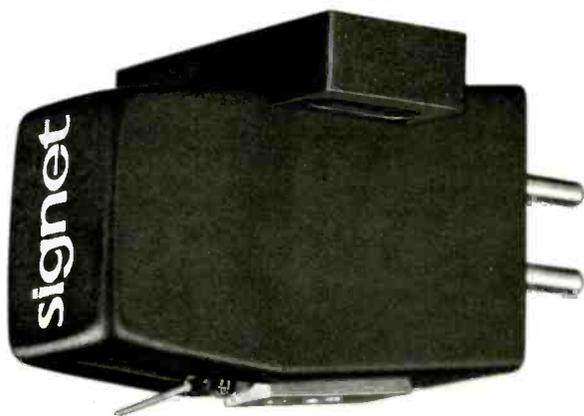
Il Rè pastore: L'amerò, sarò costante. Le Nozze di Figaro: Voi, che sapete; Giunse alfin il momento . . . Deh vieni, non tardar: Porgi, amor, qualche ristoro. Die Entführung aus dem Serail: Welcher Kummer herrscht in meiner Seele . . . Traurigkeit ward mir zum Lose. Idomeneo: Solitude amiche . . . Zeffiretti lusinghieri. Don Giovanni: In quali eccessi . . . Mi tradi; Crudel? . . . Non mi dir, bell' idol mio. Così fan tutte: Come scoglio. La Clemenza di Tito: Non più di fiori.

Rarely has Lucia Popp been so irresistible. Since singing the Queen of the Night on the Klemperer recording of *The Magic Flute* about 15 years ago, she has accomplished perhaps the most fruitful transition from coloratura to lyric soprano since Elisabeth Schwarzkopf, and has become a far more important Mozart actress than if she had stayed with the limited coloratura roles.

Unlike Schwarzkopf, Popp remains a somewhat generalized interpreter. Remarkably enough, that proves to be a source of magic here; there is none of the blandness one might expect were a lesser singer to attempt this sort of program. Popp understands her characters well and modifies her vocal approach from one to another, but she cares equally about maintaining a sense of line and emphasizing the architectural aspects of the music. Indeed, her approach is often as symphonic as it is operatic. Why not? This is an aria collection—not excerpts from complete recordings—and thus a showcase for Popp's voice, musicality, and the disarmingly unaffected openness of her personality, all of which couldn't be more congruent within the spirit of Mozart's aesthetic.

Popp owns the roles of Susanna and Pamina, but on this disc she favors territory less familiar to her—with mostly refreshing results, including a rather successful tour de force singing arias belonging to three different characters in *Le Nozze di Figaro*. The recording shows that she has lost little of the tight vocal focus heard in her coloratura years. (Though I wouldn't want to hear her attempt the Queen of the Night again, her technique remains strong enough to handle Donna Anna's "Non mi dir.") Furthermore, it demonstrates how she has gained a depth of sound and vocal weight that allow her not only to easily negotiate the difficulties in "Come scoglio," but to take on isolated arias usually assigned to mezzos. For

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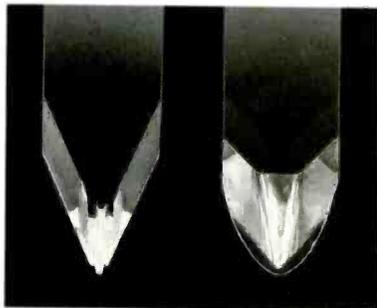
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Lucia Popp contributes magic to Mozart.

instance, while her voice may not be suited to the entire part of Cherubino, she establishes a near-perfect emotional atmosphere in "Voi, che sapete." And she sings Vitellia's "Non più di fiori" with only a hint of strain in the lower range.

Popp's suitability for the role of the Countess is debatable, but "Porgi, amor" lies well in her range. The less-than-rounded tones that come out occasionally at the top in "L'amerò, sarò costante" only add character to her account, reminding one that no matter how otherworldly she often sounds, she is indeed human.

Leonard Slatkin's expansive, big-orchestra approach is less appealing and the overly resonant engineering puts the aural counterpart of a soft-focus lens over the proceedings. Also, no translation of the texts was provided in my copy. Ah, well, so it goes with star vehicles.

The digital sound quality is excellent, aside from a few high notes where the sound distorts—a problem less noticeable with the cassette, which is ideal for Walkman purposes, as I can't imagine any Popp fan wanting to go much of anywhere without these performances. They wear especially well over repeated listening.

DAVID PATRICK STEARNS

MUSSORGSKY: Pictures at an Exhibition (arr. Ashkenazy). **BORODIN: Polovtsian Dances** from Prince Igor.

Philharmonia Orchestra, Vladimir Ashkenazy, cond. [Andrew Cornell, prod.] LONDON 410121-1 (digital recording). Cassette: 410121-4.

There's nothing lacking in its original scoring for solo piano, yet for almost its entire existence Mussorgsky's *Pictures at an Exhibition* has been fair game for transcribers. Mussorgsky composed this suite of illustrative pieces in 1874 as a memorial to Victor Hartmann, an artist who had died the year before. It was published in 1886, five years after Mussorgsky's death, and as ear-

ly as 1891 the bulk of it had been orchestrated by Mikhail Tushmanov, a student of Rimsky-Korsakov. Ravel made his famous arrangement in 1921, at the request of the conductor Serge Koussevitzky, and during the next several decades versions for orchestra were produced by Leopold Stokowski, Lucien Caillet, Henry Wood, Leonas Leonardi, Walter Goehr, and others. In recent years *Pictures* has been recast for classical guitar (by Kazuhito Yamashita, on RCA ARC 1-4203), for brass ensemble (by Elgar Howarth, on Argo ZRG 885), and for electronic music synthesizer (by Isao Tomita, on RCA ARL 1-0838). There

is even a rock music version by Emerson, Lake and Palmer (Atlantic 19122; Mobile Fidelity 031).

The orchestration on the recording under review here is remarkable less for what it is than for what it claims to be. Vladimir Ashkenazy was firmly established as one of the world's finest pianists before he took up conducting. In his brief liner note he says that he always thinks in terms of orchestral color when he plays the piano, and because for him *Pictures* "evokes the strongest orchestral associations," he has developed his own "personal vision of how the piece should sound when transposed

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from the piano to the larger canvas of the symphony orchestra." His version, he says, is "based on complete loyalty to Mussorgsky's idiom" and to what he believes was "in the composer's mind when he conceived this cycle." If that's the case, then what Mussorgsky must have had in mind was a precognition—albeit somewhat pale—of Ravel's orchestral palette.

Ashkenazy's arrangement is indeed more faithful to the original text than is Ravel's version; most significant is its inclusion of the *allegro giusto* "Promenade" sequence with which Mussorgsky connected the sections inspired by Hartmann's pencil drawings of "Samuel Goldenberg" and "Schmuyle" (actually, two drawings combined into one musical portrait) and his sketch of the "Limoges" marketplace. The orchestration itself, though, seems like a faded copy of Ravel's. Ashkenazy does not, of course, try to imitate those things in Ravel that are inimitable—the solos for alto saxophone, tuba, and muted trumpet, for example—and his use of violin harmonics at the beginning of the section labeled "Cum mortuis in lingua mortua" is arguably more effective than Ravel's muted tremolos. But, like Ravel, he chooses a solo horn to introduce the second "Promenade," a pair of bassoons to set the mood for "The Old Castle," flutes and oboes in fast alternation to depict the "Chicks in Their Shells," and so on. In both orchestrations the percussion accents tend to fall in the same places, and there are many similarities in the juxtapositions of brass and woodwind choirs.

This is an ably-crafted arrangement, but brilliant neither in sound nor conception. Ashkenazy says that he was guided by what he sees as the "deeper undercurrents of this predominantly dark-colored piece"; with that interpretation in mind, his keyboard account (London 6559) is generally more convincing.

The performance recorded here, in any case, is dazzling. Ashkenazy obviously has a flair for 19th-century music created in his homeland: Both the *Pictures* and the *Polovtsian Dances* (performed with unnamed chorus and soloists) crackle with rhythmic energy. JAMES WIERZBICKI

RACHMANINOFF: Concertos for Piano and Orchestra: No. 1, in F sharp minor, Op. 1; No. 4, in G minor, Op. 40.

Zoltán Kocsis, piano; San Francisco Symphony Orchestra, Edo De Waart, cond. [Wilhelm Hellweg, prod.] PHILIPS 6514 377 (digital recording). Cassette: 7337 377.

Even in repertoire that is too familiar—or, as in the case of both these lovely concertos, is becoming more familiar—the most dangerous thing any thoughtful reviewer can say is that he has heard everything. This disc is a perfect case in point.

What lover of Rachmaninoff's concertos would suspect that he might ever hear

these two works played as though they had been composed by Mendelssohn? Yet that is the way these performances sound—and what may be even more shocking is that the method works. While neither performance would cause a seasoned listener to ever consider giving away the Byron Janis/Fritz Reiner interpretation of the First or Arturo Benedetti Michelangeli's account of the Fourth, these versions nonetheless do far more than just hold their own. They grip the attention throughout, and, in the badly neglected Fourth, Zoltán Kocsis and Edo De Waart present a revelation of wit, ease, warmth, and total command of Rachmaninoff's idiom. The magnificent digital sound and perfect surfaces on both sides contribute greatly to one's pleasure.

De Waart has already recorded for Philips a complete cycle of Rachmaninoff's concertos, with Rafael Orozco. However, nothing in that set could possibly have prepared one for the level of command exhibited here. On this disc there is never a question of a conductor simply following his soloist in a routine manner. Instead, they are together, matching point for point and, in the process, presenting us with a unified view that makes both concertos shine as they should, but frequently do not.

Whether the balance of the planned cycle will match this initial offering remains to be seen. However, advance reports about the performance of the Third Concerto seem to promise at least as full a revelation as is found here. In the meantime, if there is a more beautiful summer record to savor than this, I'd like to hear it! THOMAS L. DIXON

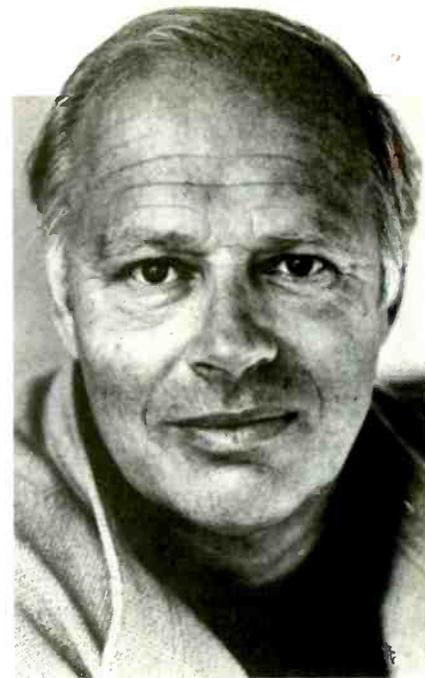
STRAUSS, R.: Daphne.

CAST:
 Daphne Lucia Popp (s)
 Gaea Ortrun Wenkel (ms)
 Apollo Reiner Goldberg (t)
 Leukippos Peter Schreier (t)
 Peneios Kurt Moll (b)

Bavarian Radio Chorus; Bavarian Radio Symphony Orchestra, Bernard Haitink, cond. [Wilhelm Meister, prod.] EMI/ANGEL DSBX 3941 (digital recording, two discs). Cassettes (2): 4X2X 3941.

There is a beautiful timbre in the lush orchestral sound of this, the second recording of *Daphne*. And that sound is, together with Bernard Haitink's enkindling conducting, the best thing about the new set.

Richard Strauss wrote *Daphne* in 1936 and '37, most of it while visiting Italy. With a text by Josef Gregor, it is called a "bucolic tragedy." And so it is, though this tragedy is no bloody, murderous affair, nor any matter of poisoning, drowning, shooting (except with an arrow), or boiling in oil, nor any of the other things that happen in many operatic tragedies. Rather, the story is that of Daphne, who loves nature, is wooed by the disguised Apollo, and, at the end, because of her desire to become one with nature, is miraculously transformed



Superb Strauss conducting from Haitink

into a laurel tree.

Daphne is suffused with the kind of beauty to which Strauss turned in his autumnal years. Over the gorgeous orchestral writing are set vocal lines of sheer lyrical appeal, both to audiences and singers. Each of the three principal roles—Daphne, Apollo, and Leukippos—is grateful for the voice, though today each can strain any but the best vocalists.

Why do I say "today"? Because there is an earlier recording of *Daphne* made in Vienna in 1964 under the baton of Karl Böhm, who conducted the 1938 premiere of the opera and to whom the work is dedicated. That Deutsche Grammophon version, recorded during a performance at the Theater-an-der-Wien, overshadows this new set in almost every respect. The one exception is in the beauty of sound Haitink draws from the Bavarian Radio Symphony Orchestra, which is everything Strauss asks.

It is an unhappy task to report that Lucia Popp is as out of place in the title role as in her recent traversal of the *Four Last Songs*. Her voice lacks the substance for the role, and she makes unpleasing releases at the end of many consonants, a habit heard so often that it eventually fatigues the ear. Though she has some effective passages early in the opera, the longer she sings, and the greater the demands, the clearer the strain becomes.

Reiner Goldberg has the unenviable job of singing a role that James King sang in his glory days. On the earlier recording with Böhm, King's voice is a marvel of unforced, elegant strength. Goldberg's problems in the present set are clear in every scene. The part is simply too much for him to handle. This is not the case with Peter Schreier, who is one of the most musical and intelligent of today's tenors. Nevertheless, where Leukippos should be the epitome of seductive sound, Schreier often resorts to tense, strained phases that occa-

sionally reach an unattractive near-scream. Again, the unkind but necessary comparison with the Böhm version must bring back the ineffaceable sound and style of the late Fritz Wunderlich, who sang this role like an angel, achieving one of the glories of the recorded repertoire.

Ortrun Wenkel and Kurt Moll are very good as Daphne's parents, and the smaller roles come off well enough, though not as well as the DG performances that placed such now-famous singers as Rita Streich, Kurt Equiluz, and Harald Pröglhöf in those same roles. Strauss lovers who do not have the Böhm recording are advised to get it. Others will have to decide which way to jump.

PAUL HUME

STRAVINSKY: Le Sacre du Printemps (1913 version).

Israel Philharmonic Orchestra, Leonard Bernstein, cond. [Hanno Rinke, prod.] DEUTSCHE GRAMMOPHON 2532 075 (digital recording). Cassette: 3302 075. CD: 410 508-2.

The Israel Philharmonic's weaknesses are individual, not collective, and here they tend to show up only in a few passages in which a performer on one of the auxiliary wind instruments has an exposed solo. As a whole the orchestra responds superbly to Bernstein's cool, controlled reading.

This interpretation is less "expressive" but ultimately more powerful than Bernstein's old version with the New York Philharmonic (Columbia MS 6010). Most of its forcefulness comes from the containment, not the unleashing, of rhythmic energy; the only deviation from rock-solid tempo is the accelerando that careens through the second half of the "Dance of the Adolescents." In the long run, it's the precision of the accents, not their decibel levels, that accounts for the performance's very palpable intensity.

Like Bernstein's current vision of this ballet score, the engineering emphasizes a general dryness of sound and weightiness of bass and percussion.

JAMES WIERZBICKI

Recitals and Miscellany

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Carol Plantamura, soprano*; Leo Smit, piano*; Nyle Steiner, Electronic Valve Instrument**; Brooklyn Philharmonic Symphony Orchestra, Lukas Foss, cond. [John Kilgore, prod.] GRAMAVISION GR 7006. Cassette: GRC 7006.

HARRISON: At the Tomb of Charles Ives. USSACHEVSKY: Divertimento 1980-1981**. CAGE, COWELL, HARRISON, THOMSON: Party Pieces. SMIT: Academic Graffiti*.

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The Tape Deck

Critiques of new cassette and open-reel releases by R. D. Darrell

Olympiad

MIDWAY BETWEEN THE SARAJEVO and LOS Angeles Olympic Games, I'm tempted to sort appropriate tape programs into national contingents striving for musical honors. And that fancy is made particularly apt by Angel's reissue of its long-popular "USA" (4XS 36936), featuring Leo Arnaud's Olympic fanfare (ABC-TV's signature for its Games broadcasts) along with favorite martial music and a ceremonial national anthem, all played by Felix Slatkin's Concert Arts Symphonic Band. Its 1972 release was a conflation of Capitol's 1958 "Symphonic Band" and 1959 "Charge!" programs—pioneering stereo spectaculars still impressive for sonic grandeur.

The mostly Sousa marches in these and in even more resplendent new digital recordings strike me as possibly more "American" (in spirit, at least) than almost anything in the so-called serious native repertory. Judge for yourself by comparing our "classicals" (below) with the marches by one of the (if not *the*) best of our university symphonic bands, Michigan's. Whatever the verdict, the "Stars and Stripes Forever and Seven Other Favorite Marches" (Pro Arte/Sinfonia digital/chrome SCS 622) testifies that the Midwestern youngsters under H. Robert Reynolds have lost none of the skills and enthusiasm fostered by William D. Revelli. Their verve is irresistible, and their bravura playing is superbly recorded with magical pianissimos and booming thunders. A Gold Medal winner for sure! For contrast, try the gracious all-Sousa tribute (Angel digital/ferric 4XS 38016) by H.M. Royal Marines Band under G. A. C. Hoskins—more polished and precise, but, as British reviewer Ivan March concedes in *Gramophone*, lacking "transatlantic unbuttoned exuberance."

United States (Classical). Probably no native composers have better resisted—or transcended—European influences than Copland and Ives. They are aptly coupled in two Pro Arte digital/chrome reissues of Sound 80 originals by the St. Paul Chamber Orchestra under Dennis Russell Davies: the *Appalachian Spring Suite* in Copland's 1972 triskaidekander scoring, with *Three Places in New England* in Ives's reduction (PCD 140); and Copland's *Short and Ives's Third Symphonies* (PCD 149). They're all first-rate performances, but the Gold Medal (as well as Grammy) winner is the first digital version of the favorite Cop-

land ballet suite in the initial scoring for only 13 instruments. If you want the full symphonic suite and liked Bernstein's 1962 New York Philharmonic one for CBS, you'll welcome his no less idiosyncratic Los Angeles Philharmonic updating (Deutsche Grammophon digital/chrome 3302 084). But the companion piece, a new Gershwin *Rhapsody in Blue*, is more mannered than ever and again inexcusably cut.

The Lukas Foss/Milwaukee Symphony "American Festival" (Pro Arte digital/chrome PCD 102) augments short favorites by Barber, Bernstein, Copland, and Ives with Henry Cowell's *Saturday Night at the Firehouse*, William Schuman's *Newsreel*, and Roger Ruggeri's *If . . . then*. But they all add up to just too contrived a patriotic gallimaufrey.

Less representative are Edward MacDowell's once idolized *Woodland Sketches* and *Sea Pieces*, which, even in Charles Fierro's empathetic account (Nonesuch 71411-4), now seem Yankee-accented paraphrases of Grieg. And Swiss-born Ernest Bloch's five String Quartets are more international than American. Nevertheless, their markedly individual conservatism commands deep respect in the Portland Quartet's powerful performances (Arabesque prestige-box SB 7511-3).

As always, in sports or music, there is strong, mostly European competition.

Austria. Lorin Maazel's fourth Vienna Philharmonic "New Year's Concert" (DG digital/chrome 410 516-4) is somewhat less *Kapellmeisterish* than earlier ones; such high-stepping polkas as the novel Johann Strauss II *Vélocipède* are most effective, and the more familiar waltzes and overtures are very well recorded—here and in the "Live" in Vienna" anthology of previously unreleased outtakes from the 1980-83 concerts (DG/Signature digital/chrome 3309 061).

Britain. What could be more rousing-ly British than the shreds and patches of Gilbert & Sullivan operettas so cunningly integrated in Charles Mackerras's lusty *Pineapple Poll* ballet score? And what could be a more surefire Gold Medalist than Sir Charles's own third and best yet recording, this time with the Philharmonia Orchestra (London digital/chrome LDR5 71119).

Czechoslovakia. Intersound regularly brings us authoritative all-Czech Supraphon programs, of which the latest is exemplary: Dvořák's exhilarating Piano Quartet,

Op. 23, in a well-nigh ideally idiomatic performance by pianist Josef Hala and violinist Josef Suk, with viola and cello colleagues (Pro Arte digital/chrome PCD 161).

(West) Germany. Recreating music-making in the twenty-year-old Mendelssohn's home is the first (for me, anyway) complete version of his miniature opera, *Die Heimkehr aus der Fremde*, starring singers/speakers Helen Donath, Dietrich Fischer-Dieskau, et al., with the Bavarian Radio Chorus and Munich Radio Orchestra under Heinz Wallberg (Arabesque NB 9138; notes but no texts). Commonly known only by its fine overture and the English title of *Son and Stranger*, this work in its full-blooded 1978 Electrola recording is a most welcome and engaging discovery.

Ireland. The familiar *Minstrel Boy* and *Believe Me If All Those Endearing Young Charms* are only two of 18 Thomas Moore Irish melodies in appropriate solo, duet, and quartet vocal versions deftly accompanied on a c. 1808 Broadwood fortepiano by Igor Kipnis. Only Jan DeGaetani sings with ideal simplicity, but even the more stylized manner of the other soloists can't seriously mar the charm of these unabashedly sentimental ditties (Nonesuch digital/ferric 79059-4; with notes but no texts).

Mexico. If your knowledge of American (in the larger sense) symphonists doesn't yet include Carlos Chávez, waste no time in discovering his six inexhaustibly vital examples in persuasive London Symphony performances led by the composer's compatriot and one-time student, Eduardo Mata (*Vox Cum Laude* prestige-box digital/chrome 2D VCS 9032)—the first complete set since Chávez's own of the early '60s for CBS Special Products.

Russia. No all-U.S.S.R. entries as yet this month, but Vladimir Ashkenazy's programs, as pianist and as conductor of the Concertgebouw Orchestra, are all quintessentially Russian in both the music and the interpretations (London digital/chromes). The solo example augments Mussorgsky's unraveled *Pictures* (far superior to Ashkenazy's c. 1967 recording) with characteristic shorter pieces by Borodin, Liadov, Taneyev, and Tchaikovsky (LDR5 71124). The other two discs complete an ecstatic Rachmaninoff symphony series that was begun last October with the Second. Now we have Symphonies No. 1 (LDR5 71103), and No. 3 with the *Youth Symphony* (LDR5 71031). **HF**

BACKBEAT

Egos Can Be Painless



SAM EMERSON/COURTESY W3

Fleetwood Mac member and solo artist Christine McVie is confident when she says, "I'll leave the trailblazing to the teenagers."

by Steven X. Rea

"CHRISTINE PERFECT" WAS A typical British blues album of the late '60s. In fact, it was a lot like the ones made by a band called Fleetwood Mac. Perfect, who'd been lead singer and songwriter in Chicken Shack, joined the Mac in 1970 and married its bassist, John McVie.

Beginning that year with "Kiln House," Fleetwood Mac (originally formed by veterans of John Mayall's Blues Breakers) adopted a leaner, pop-oriented sound—thanks, in no small part, to Christine McVie's husky, soulful vocals. She has stuck with the group through numerous personnel changes, a bitter legal dispute between the band and its former manager, relocation to America, divorce, and the band's elevation to the status of supergroup. "Rumours," released in 1977, has sold more than 15 million copies. Keyboardist and vocalist for the band (which also includes guitarist-vocalist Lindsey Buckingham, vocalist Stevie Nicks, and drummer Mick Fleetwood), McVie has written many of their hits.

Last summer she got the best producer she could find, Warner Bros. vice-president Russ Titelman (who has worked with Paul Simon and Rickie Lee Jones, among others), hired a core band comprised of guitarist-composer Todd Sharp, bassist George

Hawkins, and drummer Steve Ferrone, and headed for the Mountain Recording Studios in Montreux, Switzerland. She also recorded two tracks in England with Steve Winwood, a singer-keyboardist whom McVie, jaded rock star that she is, gushes about with all the enthusiasm of a teenage fan. The resulting LP, "Christine McVie," is a solid commercial success.

McVie plans to take her band—augmented by a second guitarist and her boyfriend, keyboardist Eddy Quintela—on a summer tour. We met in New York this spring to discuss Fleetwood Mac, her album, and her career.

Backbeat: Let's get this one over with right away: the what's-happening-with-Fleetwood-Mac? question.

McVie: Well, we're talking about getting back together in early fall.

Backbeat: I picture John McVie sitting around on his yacht, waiting for the rest of you to finish your various solo projects.

McVie: Well, that's not far from the truth, although he charters out his yacht to rich Floridians, and he's been busy.

Backbeat: You have this image as the one who writes all the band's moody songs—downbeat, depressing ballads and such. Then you release a cheery, upbeat album yourself. Was that intentional?

McVie: Well, it's true that people think I'm downbeat, but I don't know why. *Don't*

Stop is hardly depressing or moody, or *You Make Loving Fun*, or *Warm Ways*, or *Over My Head*. I think Stevie [Nicks] writes more of that type than I do. I'm trying to figure out which songs they're talking about.

Backbeat: Perhaps it's the way you sing them. There's a sort of languid, melancholy timbre to your voice.

McVie: Right. Maybe it's the plaintiveness of my voice, rather than what I'm saying.

Backbeat: What finally committed you to begin work on a new solo project?

McVie: It was around late fall of '82. I'd been spending a lot of time writing with Todd [Sharp] with no particular objective. We just enjoyed working together; we'd been very compatible as players. I liked his songs. And it became increasingly apparent that something was coming out of our collaboration. Then I met with Russ Titelman. I knew I needed a producer I could trust and who could get the best performance out of me, the best feeling. We got on really well, but he was committed to "Hearts and Bones" with Paul Simon. I didn't want another producer, so I waited.

Backbeat: How did you choose your band?

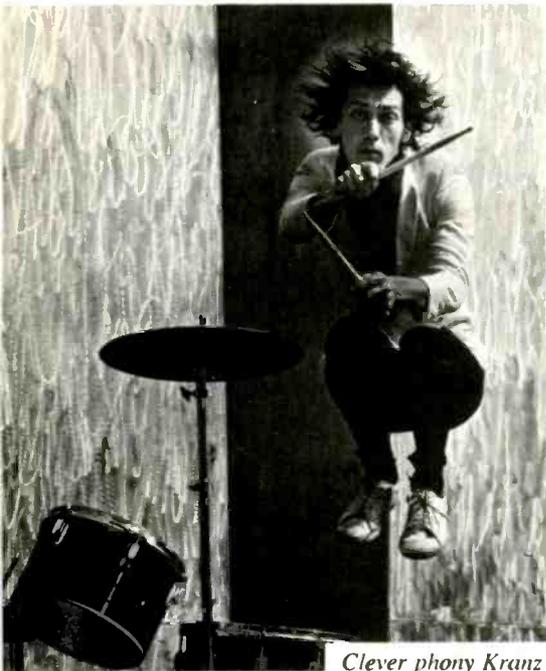
McVie: I've known Todd since he played with Bob Welch about nine years ago, when Bob left Fleetwood Mac. I met George [Hawkins] seven years ago when he was playing with Kenny Loggins. Steve [Ferrone], formerly drummer with the Average White Band, was new to us. Russ Titelman recommended him.

Backbeat: Was Montreux next?

McVie: No, Todd and I made all the demos at my house first. My music room was converted temporarily with a portable studio system and a Teac 4-track machine, a drum machine, microphones, electric piano, synthesizer, grand piano, and so on. We were well organized (not like Fleetwood Mac!). We rehearsed the band for about one week and then went to the Montreux studio.

Backbeat: How did you choose it?

McVie: I really like being in Europe. I wanted to make it something of an adven-
(Continued on page 90)



Reviews



Clever phony Kranz (left); rappers Run-D.M.C. (center) & Davy DMX

The Real Jam Masters

Reviewed by Crispin Cioe

Modern rap music—solo or call-and-response verse recited over an original or stolen rhythm track—has not just survived commercial dilution and artistic cooptation since its first hit, Kurtis Blow's *The Breaks*, was released in 1979. Two records from 1982 firmly established the genre: *The Message*, by Grandmaster Flash & the Furious Five, an impressionistic swirl of street sounds and impassioned, angry bulletins, with a churning, sinister beat; and *Planet Rock*, from Afrika Bambaata & Soul Sonic Force, a groundbreaking union of electronic funk and dreamy European synth-pop. Since then, the studio craft and aesthetics of rap and "beat box" music (made with elec-

tronic/digital drum machines and synthesizers instead of the real thing) have grown by leaps and bounds. Although nearly everything continues to be produced in New York City, several German and English 12-inch rap-oriented sides became international hits in 1983. This cross-fertilization, combined with the fact that small, street-wise American labels can still turn a solid profit on a hit dance record, has generated a slew of adventurous, often exhilarating singles in the past few months.

The film *Wild Style* and its soundtrack LP are the best raw evocation of the origins of rap, which started as an act of live performance in discos. Deejay "scratchers"

manipulate two turntables at once, supplying both rhythm and sound effects, while rappers and break dancers do their respective things. Of course, Bronx clubs still carry on this tradition, but if you don't live in the neighborhood or have an adventurous spirit, the "Wild Style" LP projects a crackling warmth and the loose-limbed precision of a funky club date.

Hard-core minimalist rap, which places daredevil raconteurs in a rhythmic high-wire act over a bare-bones electronic groove, has become more of a recording studio phenomenon, and the style is achieving a kind of creative zenith this year. Perhaps the most riveting example is *No Sell Out*. Over a sparse but extremely kinetic track, session drummer/producer Keith LeBlanc spliced excerpts from politician/philosopher Malcolm X's early-Sixties speeches, resulting in a mesmerizing piece of conceptual-art-cum-dancefloor-hip-hop. *Renegades of Funk*, the latest disc from Afrika Bambaata, is a mostly joyous paean to "the renegades of this atomic age." In Bambaata's scheme of things, the Soul Sonic Force and its audience of break-dancing fans share a direct lineage with "Tom Paine, Sitting Bull, and Martin Luther King." Producers Arthur Baker and John Robie's pulsating track drives the rappers like a Maserati negotiating a hairpin curve.

Davy DMX—a former DJ and scratcher for Kurtis Blow—named himself, appropriately, after a brand of electronic drum machine, and he is one of the true master scratchers. Because he has toured

Wild Style

Charlie Ahearn & Chris Stein, producers. Animal APE 6005-ST

No Sell Out (Malcolm X)

Keith LeBlanc, producer

Tommy Boy TB 840 (12-inch single)

Afrika Bambaata & Soul Sonic Force: Renegades of Funk

Arthur Baker & John Robie, producers

Tommy Boy TB 839 (12-inch single)

Davy DMX: One for the Treble (Fresh)

David Reeves, Jr., producer

Tuff City (CBS Assoc.) 4Z9 04955

(12-inch single)

Run-D.M.C.:

Hard Times/Jam-Master Jay

Russell Simmons & Larry Smith,

producers. Profile PRO 7036-B

(12-inch single)

Warp 9: Beat Wave

Richard Scher & Lotti Golden,

producers. Prism PDS 485-A

(12-inch single)

Grandmaster Melle Mel: Jesse

Sylvia Robinson & Reggie Griffin,

producers. Sugar Hill SH 32016-A

(12-inch single)

IRT: Watch the Closing Doors!

Paul Rodriguez & Randy Klein,

producers. RCA PW 13699

(12-inch single)

George Kranz:

Trommeltanz (Din Daa Daa)

Christophe Franke & George Kranz,

producers. Personal PRO 49804-X

(12-inch single)

Art of Noise: Into Battle

Trevor Horn, producer. Island 096974

Europe extensively. DMX has a sharp sense of how attractive sound-treatment innovations are to American dancers. His recent single, *One for the Treble (Fresh)*, pits his complex technique against intricately shifting drum patterns.

Run-D.M.C. is an outstanding duo. Mixed by Blow, the rhythm track for *Hard Times*—a hard-edged current events commentary not unlike *The Message*—is a delicate layering of synthesized sounds with empty space. (Run-D.M.C.'s eponymous debut album includes *Hard Times* and *It's Like That*, plus four additional precision tracks.)

Warp 9 is one of several pop/r&b crossovers, a trio that alternates rapping and singing without losing a pleasantly bouncy street feel; Boe Brown is especially commanding and rhythmic. *Beat Wave* is brightly percussive, fusing Latin and funk influences with rap and beat box. From New Jersey's Sugarhill Records comes *Jesse*, by Grandmaster Melle Mel, a big-production ode to Jesse Jackson featuring slick horns, up-to-the-minute synthesizers, and a detailed endorsement. *Watch the Closing Doors!* by IRT (Interboro Rhythm Team) is a clever excursion on an uptown west side Manhattan subway car, complete with muffled announcements from the conductor.

Two European singles extend the artistic boundaries of modern dance music. George Kranz's *Trommeltanz* (German for "drum dance") has been described aptly by Stewart Copeland of the Police as "a dialogue between a chimpanzee and a drummer." Chanting "Din Daa Daa" and playing a heavy backbeat, Kranz begins singing busier and busier drum figures, which he then duplicates flawlessly on his kit.

Finally, we have the instrumental *Beat Box*, from the "Into Battle" LP by the Art of Noise, brainchild of Trevor Horn (producer of Yes, among others) and three studio musicians. Using a Fairlight synthesizer, Horn starts with a massive natural drum

track that's then programmed, creating an electronic rhythm from a true source. From there, the song explores an array of sounds, stereo panning techniques, and inventive compositional ideas. Not too coincidentally, *Beat Box* is the most aurally influential dance record of 1984. So far, at least.

Back in the Saddle Again: American Cowboy Songs
 Charlie Seeman, producer
 New World 314/315 (two discs)
 (231 E. 51st St.,
 New York, N.Y. 10022)

Real cowboys sang to provide relief from the monotony of the range and from their work, as well as to calm the cattle. They sang a cappella in harsh, arrhythmic voices; because the music was primarily functional, the tune was secondary to the words. Derived from traditional Anglo-Scots melodies, often with hundreds of verses, the music exists solely in oral tradition; very little of it was ever put on vinyl. But the 28 songs recorded between 1925 and 1980 on "Back in the Saddle Again" offer several examples, even if they were cut decades after the cowboy's heyday, the 50-year period of the cattle drives after the Civil War. Harry Jackson's 1957 *The Pot Wrassler* and John G. Prude's 1942 version of *Streets of Laredo* are the roughest and most memorable.

In the more domesticized, transitional West of the turn of the century, westerners (who may or may not have actually been cowboys) accompanied themselves on guitar. They might sing traditional ballads of hardship and danger in the (already!) Old West, as Harry McClintock does here with his Bunyonesque 1928 reading of *The Old Chisholm Trail*, and as Jules Verne Allen does in his 1929 version of *The Dying Cowboy*. Or they might already take a more romanticized or sentimental view, as in Carl T. Sprague's 1925 *When the Work's*

All Done This Fall.

As the realities of the Old West receded further, Americans became more fascinated with its myths. But during the Depression, the bottom fell out of the industry of movie westerns. Hollywood decided that the solution was singing cowboys, completely fictitious characters who did heroic deeds and sang of love and freedom in the wide-open spaces. Of these songs, Gene Autry's 1939 *Back in the Saddle Again* remains the archetype.

Singing cowboys used bigger bands and, eventually, whole orchestras, but they caught the public fancy. For better or worse, they gave rise to such variations as Wilf Carter (a virtuoso yodeler), Tex Ritter (the purest among the most commercialized), Patsy Montana (the first million-selling female artist), the Girls of the Golden West (gimmicky schmaltz), Bob Wills & the Texas Playboys (western swing), and the Sons of the Pioneers (who perfected creamy-smooth western harmonies). "Back in the Saddle Again" covers it all—from the cattle range to show biz.

JOHN MORTHLAND

The Cars: Heartbeat City
 Robert John "Mutt" Lange & the Cars,
 producers. Elektra 60296-1

Take away the Cars' pretentious solemnity, high-tech orchestrations, and self-conscious Beat poetry, and what's left? Cars and girls, the stuff of every teenage boy's rock dreams. But Ric Ocasek has been either unwilling or unable to connect dreams to life, to use cars and girls as metaphors for everything desired, won, and lost in modern America (in the manner of, say, Bruce Springsteen). After the straightforward, stylish pop of their 1978 debut, the group began buffing their hit machine with arty touches. And as they were busy polishing, the engine fell to rot.

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Marvin Gaye: 1939–1984

MARVIN GAYE WAS IMPORTANT not only because he helped create the Motown empire, but because he left it. Originally hired by president Berry Gordy as a session drummer in 1961, he coauthored *Dancing in the Streets*, an enormous hit for Martha & the Vandellas; brought out something electric in Smokey Robinson, who produced both *I'll Be Doggone* and *Ain't That Peculiar* for him; and scored hits quickly and deftly, from the gritty *Hitch Hike* to the gospel shout of *Can I Get a Witness* to the sweet buoyancy of *You're a Wonderful One*. And that was only the first four years. This formative period culminated in the masterpiece *I Heard It Through the Grapevine*, a No. 1 hit in 1968 that's still played a lot in clubs and discos everywhere.

Gaye's duets with Tammi Terrell were much more than a sideline. When she died in 1970 he stopped working temporarily, reemerging with the self-composed and self-produced "What's Going On," regarded as the first political concept album by a major black artist. It was also his most introspective. Gaye himself connected "What's Going On" with Terrell's inspira-



tion. "I was profoundly affected by her," he said at the time. "This has been a very spiritual period of my life; it's my time to come out as an artist."

In the 1976 edition of *The Rolling Stone History of Rock & Roll*, Joe McEwen wrote, "Perhaps to cap his career, Gaye followed his more political work with a return, not to 'love,' but to pure eroticism, with the irresistible *Let's Get It On* (1973), a huge hit with some claim to being the sexiest record Motown ever produced." But Gaye topped himself twice after that, with 1977's *Got to Give It Up* and 1982's *Sexual Healing*.

For a man who gave so much in such a short time, this discography should serve as a sort of tribute. After 20 years, 42 Top Ten hits—14 of them No. 1—and a change of labels to Columbia, Gaye finally received two Grammys for *Sexual Healing*. Perhaps his overt politics and eroticism were just different sides of the same person: an uncompromising artist who, fortunately for us, could accept success only on his own terms. He will be missed.

—Georgia Christgau

Selected Discography

Compiled by Mildred Camacho-Castillo

ALBUMS

MARVIN GAYE

- Greatest Hits.** Tamla 252; 1964.
- How Sweet It Is to Be Loved by You.** Tamla 258; 1965.
- Moods of Marvin Gaye.** Tamla 266; 1966.
- I Heard It Through the Grapevine.** Tamla 285; 1968.
- M.P.G.** Tamla 292; 1969.
- Superhits.** Tamla 300; 1969.
- What's Going On.** Tamla 310; 1971.
- Trouble Man.** Tamla 322; 1973.
- Let's Get It On.** Tamla 329; 1973.
- Marvin Gaye Live.** Tamla 333; 1974.
- Anthology.** Tamla 790/1 (two discs); 1974.
- I Want You.** Tamla 342; 1976.
- Live at the London Palladium.** Tamla 353-R2 (two discs); 1977.
- Here, My Dear.** Tamla T 364 (two discs); 1978.
- Midnight Love.** Columbia FC 38197; 1982.

With MARY WELLS

- Together.** Tamla 5260-ML; 1964.

With TAMMI TERRELL

- United.** Tamla 277; 1967.
- You're All I Need to Get By.** Tamla 284; 1968.
- Marvin Gaye & His Girls.** (with Wells, Terrell, and Kim Weston). Tamla 293; 1969.
- Easy.** Tamla 294; 1969.

With DIANA ROSS

- Diana Ross & Marvin Gaye.** Tamla M 5124-V1, 1974.

SINGLES

MARVIN GAYE

- Hitch Hike.** Tamla 54075; 1963.
- Pride and Joy.** Tamla 54079; 1963.
- Can I Get a Witness.** Tamla 54087; 1963.
- You're a Wonderful One.** Tamla 54093; 1964.
- Try It Baby.** Tamla 54095; 1964.
- Baby Don't You Do It.** Tamla 54101; 1964.
- How Sweet It Is to Be Loved by You.** Tamla 54107; 1964.
- I'll Be Doggone.** Tamla 54112; 1965.
- Pretty Little Baby.** Tamla 54117; 1965.
- Ain't That Peculiar.** Tamla 54122; 1965.
- One More Heartache.** Tamla 54129; 1966.
- Take This Heart of Mine.** Tamla 54132; 1966.
- Little Darling, I Need You.** Tamla 54138; 1966.
- Your Unchanging Love.** Tamla 54153; 1967.
- You.** Tamla 54160; 1968.
- Chained.** Tamla 54170; 1968.
- I Heard It Through the Grapevine.** Tamla 54176; 1968.
- Too Busy Thinking About My Baby.** Tamla 54181; 1969.
- That's the Way Love Is.** Tamla 54185; 1969.
- How Can I Forget.** Tamla 54190; 1970.
- The End of Our Road.** Tamla 54195; 1970.
- What's Going On.** Tamla 54201; 1971.
- Mercy, Mercy Me (The Ecology).** Tamla 54207; 1971.
- Inner City Blues (Make Me Wanna Holler).** Tamla 54209; 1971.
- Trouble Man.** Tamla 54228; 1972.
- Let's Get It On.** Tamla 54234; 1973.

- Come Get to This.** Tamla 54241; 1973.
- Distant Lover.** Tamla 54253; 1974.
- I Want You.** Tamla 54264; 1976.
- Got to Give It Up—Part I.** Tamla 54280; 1977.
- Sexual Healing.** Columbia 38-03302; 1982.

- With MARTHA & THE VANDELLAS**
- Stubborn Kind of Fellow.** Tamla 54068; 1962.

With MARY WELLS

- Once Upon a Time/What's the Matter with You Baby.** Motown 1057; 1964.

With KIM WESTON

- It Takes Two.** Tamla 54141; 1967.

With TAMMI TERRELL

- Ain't No Mountain High Enough.** Tamla 5149; 1967.
- Your Precious Love.** Tamla 54156; 1967.
- If I Could Build My Whole World Around You/If This World Were Mine.** Tamla 54161; 1967.
- Ain't Nothing Like the Real Thing.** Tamla 54163; 1968.
- You're All I Need to Get By.** Tamla 54169; 1968.
- Keep on Lovin' Me Honey.** Tamla 54173; 1968.
- Good Lovin' Ain't Easy to Come By.** Tamla 54179; 1969.
- What You Gave Me.** Tamla 54187; 1969.
- The Onion Song.** Tamla 54192; 1970.

With DIANA ROSS

- You're a Special Part of Me.** Motown 1280; 1973.
- My Mistake (Was to Love You).** Motown 1269; 1974.

dows the emptiness showed, as the Cars discovered with their poorly received, indulgently eclectic third album, "Panorama." So "Shake It Up" concentrated again on commercial, killer singles. In Boston, the legend goes that they chose them by playing tracks through a pair of cheap car-radio speakers. Indeed, the bracing choruses, slightly synthesizers, and chunky axe-grinding of *Shake It Up, Since You're Gone*, and *Cruiser* were designed to burst from the dashboard. "Heartbeat City" also yields three exuberant cuts: *You Might Think*, which, with its glassy toy-like piano, could be mistaken for an early Abba song; *Stranger Eyes*, which gallops on Elliot Easton's low-rent guitars and Ben Orr's salacious wailing; and *Drive*, a graceful lovelorn ballad that neatly parallels the sex-as-driving imagery of *Stranger Eyes*.

The rest of "Heartbeat City" is strenuously tuneful, but the Cars take no risks, make no creative progress. In fact, the album is often regressive. *It's Not the Night* is screechy, thudding, virtually unrecognizable arena rock. And on *Hello Again*, with its ponderous power chords and a pompous snippet of Munchkins backed by a symphony, the Cars' new producer does for the band what they've been threatening to do to themselves for years—something even their old producer, Roy Thomas Baker, couldn't do. He turns them into Queen.

JOYCE MILLMAN

Z. Z. Hill: I'm a Blues Man
Tommy Couch & Wolf Stephenson,
producers. Malaco 7415
(P.O. Box 9287, Jackson, Miss. 39206)

Malaco Studio has been turning out great soul music records for years, from Jean Knight's 1971 single *Mr. Big Stuff* to "McKinley Mitchell," a memorable label debut from 1978. But what has really put this mini music-combine on the map lately has been the unparalleled chart success of Z. Z. Hill: His '82 LP "Down Home" was the largest-selling blues album in a decade. This follow-up clearly illustrates why.

Hill's voice combines the sad, growling grit of Bobby Bland with a sweetness in the upper register that's all his own. Malaco rhythm sections, often including guitar masters such as Jimmy Johnson, are invariably tight and swinging, even on thumping swamp-funk grooves. Arrangements are straightforward, mixes crisp. But the catalyst is the songs Hill chooses, and the touching, raw vulnerability they reveal in him.

These songs have real stories to tell, allowing Hill to become acutely intimate with his audience as he explores every angle of love, be it true, cheating, carnal, or jealous. On *Three Into Two Won't Go*, Hill laments that he's "tired of checkin' into cheap motel rooms/under false and pretentious names," one of several convincing

arguments for the truth of the title. Yet on the next number, *Cheatin' Love* (by the always resourceful Southern soul queen Denise LaSalle), he looks ahead to his next tryst: "I'll be on time/with our Coke and rum/for cheating love/is the best kind."

Hill explores these ironies in delicious detail on "I'm a Blues Man," even though he never becomes maudlin or melodramatic. But he does have a lot of tenderness, which ought to keep him singing the blues for a long time to come. CRISPIN CIOE

Jason & the Scorchers: Fervor
Jim Dickinson, Jack Emerson,
Jeff Johnson, & Warner Hodges,
producers. EMI America SQ 19008
(seven-song EP)

The LeRoi Brothers: Forget About the Danger . . . Think of the Fun
Craig Leon & Denny Bruce, producers
Columbia 5C 39106 (six-song EP)

After hearing too much warmed-over '50s and '60s mush (Billy Joel's "An Innocent Man," the Stray Cats, and the plethora of neo-psychedelic outfits from L.A., Boston, and New York), it comes as no little pleasure to sit down and listen—or stand up and dance—to the unpretentious, ebullient music of groups like Jason & the Scorchers and the LeRoi Brothers. They're both Southern bands (Nashville and Austin, respectively) with recent, respected independent re-

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BACKBEAT Reviews

leases. And both have paid their proverbial dues.

"Fervor" is a reissue of the Scorchers' independent EP on Praxis, and then some. R.E.M.'s Michael Stipe co-wrote and sang harmony on *Hot Nights in Georgia* and *Both Sides of the Line*. And the trio itself has added a hypersonic version of Bob Dylan's *Absolutely Sweet Marie*, featuring Jason Ringenberg's wonderfully wheezy harmonica and some fierce guitar by Warner Hodges: it's a glorious reading. Ringenberg's screwy intensity is both passionate and fun. His voice is reminiscent of Gram Parsons, if a little wackier.

Where the Scorchers opt for tangled webs of imagery, the LeRoi Brothers keep things streamlined and down-home, celebrating basic, time-worn themes. Joe Doerr's booming, midrange baritone perfectly suits rocking party songs such as *Pretty Little Lights of Town* and the bopping public-service ditty *D.W.I.* (Driving while Intoxicated). On the band's version of Roy Head's *Treat Her Right*, bassist Jackie Newhouse lets loose a thundering Yardbirds riff, while guitarist Don Leady pulls out all the stops. Another cover, Ronnie Self's *Ain't I'm a Dog*, is a whoopy rockabilly similar to his *Bop-a-Lena*. Throughout, Mike Buck's backbeat is both insistent and invigorating.

Most importantly, the denominator shared by these two considerably different outfits is how easily they evoke rock and country traditions and still manage to sound vibrant and contemporary. No rehashed rockabilly here, and no nostalgia either—just vital American music. STEVEN X. REA

Nena: 99 Luftballons

Reinhold Heil & Manne Praeger, producers. Epic BFE 39294

Nena, a German rock quintet, has made its initial mark (so to speak) in the U.S. with true distinction. 99 *Luftballons*, a Top 3 hit



Nena: better in German



LeRoi Brothers: the same as Jason & the Scorchers, but different

single, was one of the rare foreign-language records to gather wide American airplay in the last several years. Unfortunately, 99 *Red Balloons*, its obligatory but imprecise English translation, was the equivalent of a badly dubbed film: It conveyed hardly any of the incisive wit and vivid imagery of the original lyrics, which describe a nuclear war.

One reports happily, therefore, that one side of this initial U.S. release (a compilation of cuts from two prior albums) is in the group's native tongue, and the other is well-translated English. The latter tracks, of non-political nature, offer a comfortable, vernacularized transition from the German. Lead singer Nena Kerner has a voice of silver and steel: She is both seductive and energetic as she explores obsessive love in *Hangin' On You*, *Just a Dream*, and ?—the last a very appealing, ungimmicky song, title notwithstanding.

The second side of "99 Luftballons" is no less compelling. Throughout, the four-man rhythm section combines hot pop-rock and high-tech synthesizer gleam without falling over the edge into predictable clichés. Their apt arrangements give each bouncy melody genuine memorability as well as true rock and roll weight. Had printed lyrics been supplied, even in German, they would have revealed deft poetry underlying the musical inventiveness of *Leuchtturms*, *Kino* (*At the Movies*), and *Unerkannt Durchs Marchenland* (*In Dreamland*). But in either tongue, Nena is a powerhouse.

BRIAN CHIN

Laura Nyro: *Mother's Spiritual*

Laura Nyro, Todd Rundgren, & Nydia Mata, producers
CBS FC 39215

The evolution in song of the best iconoclasts carries no formula except their own magical potions, and Laura Nyro has many

earthy fragrances of sound and poetry yet to be pulled from her velvety artist's cape. Especially, the newer, quieter, less frantic tone from "Nestled" has come into full blossom on "Mother's Spiritual."

The surge of feminist consciousness in her stories of romance and motherhood will delight many listeners and unsettle others. Nyro is no dogmatist: The independence she has always shown in songs such as "And When I Die" and "Wedding Bell Blues" continues to find expression in secret codes of language rather than in political rhetoric. These lyrics are the stuff of which fairy tales are made. Yet they reveal Nyro at her most candid and down-to-earth.

Musically, the album is tight and uplifting. Nyro's melodies often sound like stretched-out, dreamy versions of jazz scatting. Her songs are graceful, undulent, and always rhythmic to the core. As a singer she is very much in touch with the timbres of the instruments that surround her—especially electric guitar, piano harmonies, and the pulsing traps and congas that lend a far-away, "freight train" atmosphere.

"Mother's Spiritual" documents both Nyro's struggle and her victory. Her visions do not want for lushness or power; they are a musically satisfying mix of the poetry and the anti-poetry in our humble existence. She pushes past the sleek security of conventional lyrics, to the words people really do say on their best and worst days. One refrain echoes throughout: "What is life? Did you read about it in a magazine?" This reviewer heard about it on "Mother's Spiritual."
LAURA KOPELWITZ

R.E.M.: *Reckoning*

Mitch Easter & Don Dixon, producers
I.R.S. SP 70044

So much has been made of R.E.M.'s literary impenetrability that it comes as a relief

when the band commences its second album with a parody of itself, *Harborcoat*. Over a galloping drumbeat and chiming guitar, Michael Stipe sings—I think, of course—"There's a splinter in your eye that reads 'React.'" The proper sort of reactions to this brand of genius-college-boy music are "Huh?" or "Wow!"

Immediately, however, "Reckoning" becomes much more enjoyable and more moving than a mere quest for buried meaning. The gleaming, refracted notes of Pete Buck's delicate guitar figure in the center of the next song, *Seven Chinese Brothers*, combine with Stipe's frayed vocal to create an atmosphere of languid sadness that's a pleasure to identify with.

More than any rock act since Neil Young, R.E.M. connects earlier styles to a querulous, quixotic point of view that turns clichés into frissons. Songs like (*Don't Go Back to*) *Rockville* and *Pretty Persuasion*, with their ineluctable melodies, powerful guitar hooks, and Stipe's redolent moan, have obvious sources but never succumb to knowing homage. The former is the Monkees' *Last Train to Clarksville* right down to the meter of its title, invested with the sort of ache that the grown-up Monkees generation can appreciate.

R.E.M.'s previous album, "Murmur," was admired for the loamy thickness of its sound; "Reckoning," also produced by Mitch Easter and Don Dixon, is much crisper. Of course, Stipe's voice would sound thick and loamy if he were yelling "Fire!" into a bullhorn, and Buck will always seem like a Byrd on the wing: the band's trademarks are still in place. But this fresh clarity helps emphasize Bill Berry's precise drumming and the danceable groove of bass player Mike Mills.

"Reckoning" will help the skeptics understand what all the raving was about (I know it puzzled me): craftsmanship with wit, and the replacement of rock's most exhausted tone—hip irony—with a dry, wry refusal to posture. **KEN TUCKER**

Jazz

Jim Dapogny's Chicago Jazz Band

George H. Buck Jr., producer
Jazzology J 120 (3008 Wadsworth Mill Place, Decatur, Ga. 30032)

At first, Jim Dapogny's Chicago Jazz Band threatens to be just another traditional Dixieland warhorse. The only suggestion of originality in the opener, a slick but stereotyped treatment of *At the Jazz Band Ball*, is Dapogny's broad, stomping piano solo. Once that number is out of the way, however, the band begins to show its resourcefulness. The tunes, except for an original

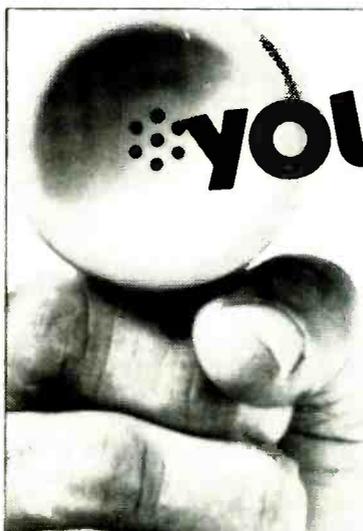
blues by Dapogny and Fats Waller's *Caught*, are familiar standards. But either they are a step or two removed from dead center (*Oh, Peter, You're So Nice* and *I Never Knew What a Gal Could Do*) or they take a fresh view of old material.

An adaptation of Don Redman's arrangement for McKinney's Cotton Pickers of *Four or Five Times*, for example, drops the vocal and gives Dapogny the solo. The surprise and charm of Ron McDonald's single-string acoustic guitar pops up in the midst of a bubbling, bouncy *Copenhagen*. Paul Klinger's unusual cornet

playing on *Sister Kate* is dotted with stretching, muttering breaks. And *Sentimental Gentleman from Georgia* is inspired not by Tommy Dorsey but by the tempestuous Waller version. **JOHN S. WILSON**

Haywood Henry: The Gentle Monster
Robert Sunenblick, Mark Feldman, & Don Sickler, producers
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BACKBEAT Reviews

Erskine Hawkins, Earl Hines, and Sy Oliver; played baritone saxophone on rock recording sessions for ten years; and doubles on tenor, alto, and soprano saxophones and clarinet in Broadway pit bands. In short, a survivor. Now, at the age of seventy-five, Henry has been given his first credible opportunity to record as a leader.

Henry's rugged, deep-toned swagger on baritone saxophone shows why he was Duke Ellington's first-choice substitute for Harry Carney. He has a bit more fluidity than Carney, and an agile drive that is closer to Gerry Mulligan's. The setting on "The Gentle Monster" could scarcely be improved upon: Henry is surrounded by four excellent musicians playing in top form (Joe Newman, trumpet; Hank Jones, piano; George Duvivier, bass; and Ben Riley, drums). Don Sickler's arrangements are models of the crisp, urgent attack that one associates with the '30s and '40s jump bands of Harlem.

On slower pieces, Henry is sensitive to shading and the subtleties of tonal inflections. He plays his own pop ballad, *Put Yourself in My Place* (which he recorded with Hawkins's band in 1940), with stretched phrasing and provocative breaks. *Good Morning*, *Heartache* is dark and brooding. *You Don't Know What Love Is* is very deliberately phrased, and *Blue Sunrise* rocks gently.

JOHN S. WILSON

The Jazztet: Moment to Moment

Giovanni Bonandrini, producer
Soul Note SN 1066

The New York Jazz Quartet in Chicago

Susan & Jim Norman, producers
Bee Hive BH 7013 (1130 Colfax St.,
Evanston, Ill. 60201)

The original Jazztet was the right group at the wrong time. Blessed with a magnificent stylist in Art Farmer and a top-notch writer in saxophonist Benny Golson, this early-Sixties hard-bop unit concentrated on sharply arranged group performances just as the cult of the soloist was beginning. Wisely avoiding remakes of any classic Jazztet material, "Moment to Moment" consists of newer Golson pieces and early Farmer and Golson tunes associated with other bands. *Farmer's Market* and *Along Came Betty* among them.

With a front line of flugelhorn, tenor sax, and trombone (the great Curtis Fuller), the sound is dark but never somber. Supported by a crisp rhythm section, the music takes off with a power that puts it right on today's cutting edge. Golson's emphasis on organization is a breath of fresh air; each soloist is forced to make the most of his moment. Special mention must be made of Farmer's still majestic blowing and Golson's bizarre tenor tone, which turns his mainstream solos into radical statements.

Compared to this inspired reunion, "In Chicago" sounds positively tame. The



DEBORAH FEINGOLD

Amina Myers: She could carry the whole show herself, if she had to.

playing is fine, but the key ingredient missing is what "Moment" has in abundance: challenging writing. The New York Jazz Quartet, an occasional gathering built around pianist Roland Hanna and reedman Frank Wess, is a virtuoso's band: Too often ensemble work takes a back seat to rip-roaring solos. Surface excitement is not enough, even when supplied by great musicians. Only on ballads is their true communion as a group felt. Bassist George Mraz's *Wisteria* and a glowing performance of the standard *You Don't Know What Love Is* are warm and knowing with real interaction and support. The New York Jazz Quartet should devote more time to arrangements; they've got the soloing down cold.

STEVE FUTTERMAN

**Amina Claudine Myers:
The Circle of Time**

Giovanni Bonandrini, producer
Black Saint BSR 0078

Amina Claudine Myers is one of those special artists who can turn every performance into an intimate experience. The contemporary jazz scene may have more innovative pianists and technically gifted singer-songwriters, but few are as expressive or utterly personal. By mixing her church roots and jazz training with everyone from Gene Ammons to Muhal Richard Abrams, Myers combines free form, gospel, and lyric impressionism into an accessible whole

without sounding fashionably eclectic. She is the real thing.

As a pianist Myers always sacrifices flash to feeling. Yet "The Circle of Time" isn't introspective or moody; her hearty, down-home spirit energizes every note she plays. What makes her so arresting is how subtly she mixes this funky foundation with an avant jazz imagination. There is a clarity of line and space to her solos that avoids the modernist shortcuts of muddy chord clusters and key-bashing dynamics.

Two of the album's three instrumentals are built on simple but stretching blues changes; *The Clock*, a little more ruminative, slips in ingenious stride and atonal bits. The cohesiveness and substance of Myers's piano playing makes up for its lack of inventiveness.

The vocal numbers are almost as successful. At its best her limited range is marked by the same economy of means and expressiveness as her keyboard work. But it is not a commanding voice; when teamed with banal lyrics and eccentric tonal tricks, as on the title track, it can be a hair short of annoying. *Plowed Fields*, a lovely evocation of her pastoral girlhood, and *Do You Want to Be Saved?*, with its out-and-out gospel groove and stirring organ solo, are better conceived.

Myers is supported on "Circle" by two sympathetic team players, bassist Don

Pate and the unjustly overlooked Thurman Barker on drums, who is the most sensitive cymbal player this side of Jack DeJohnette.

STEVE FUTTERMAN

Kenny Wheeler: Double, Double You

Manfred Eicher, producer
ECM 1262

Dave Holland Quintet: Jumpin' In

Manfred Eicher, producer
ECM 1269

Trumpeter Kenny Wheeler and bassist Dave Holland continue a long musical relationship on these two albums. Both men recorded with Anthony Braxton in the mid-Seventies, and Wheeler's first two records featured Holland and Jack DeJohnette, who is also the drummer on "Double, Double You."

Holland's "Conference of the Birds" (ECM 1027) is an acknowledged classic of the new jazz. Though "Jumpin' In" may not be as important as that album, it follows many of the same procedures—the musicians are given carefully constructed themes, but are then left free, while encouraged to improvise together—and it is consistently more vigorous and surprising than "Double, Double You." Wheeler's big tone is both sensitive and inventive: From dark, lower depths he can leap into some unearthly Miles Davis squeals and trills

without losing the direction of his melody. But at times "Double" declines into a kind of slack affability, despite energetic solos by Mike Brecker (he has rarely sounded this good), Holland, and DeJohnette.

The problem may be the compositions and arrangements: On *W. W.* and *Foxy Trot*, Wheeler includes out-of-tempo introductions in which one musician states portentously the minimal themes. When the full band comes in, it goes over the same material, which has by then worn out part of its welcome. Most effective are Wheeler's duet with John Taylor on *Ma Bel* and DeJohnette's stirring solo (and his only solo here) on the uptempo *Mark Time*.

"Jumpin' In," particularly the title cut, seems positively impetuous by comparison. The improvisations of this quintet—which includes Wheeler, saxophonist Steve Coleman, trombonist Julian Priester, and drummer Steve Ellington as well as the leader (significantly there is no pianist)—achieve a freewheeling jauntiness just this side of Dixieland.

First Snow is a delicate theme in 6/8 that features Wheeler prominently, while *Jumpin' In* is a wild, uptempo piece. The serene *Sunrise* avoids the cud-chewing placidity of some jazz tributes to natural wonders. On *The Dragon and the Samurai* Holland solos brilliantly, and it's a joy to hear Priester again.

MICHAEL ULLMAN

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CLASSICAL REVIEWS

(Continued from page 75)

as musical director, the orchestra turned its attention to new music. Its "Meet the Moderns" series draws large crowds to its home at the Brooklyn Academy of Music and to Lower Manhattan's Cooper Union, and its programming is refreshingly varied, reflecting a healthily eclectic view of what is happening in music today. All the more peculiar, then, that this record contains not one really substantial work—that it is in essence an album of curiosities, each piece having some sort of extramusical gimmick. Nor are various musical styles represented: A sort of peculiarly American tonal idiom predominates in three of the four compositions.

Lou Harrison's *At the Tomb of Charles Ives* (1963), though admittedly a curiosity, is fortunately free of the gimmickry. This four-minute work, scored for the exotic combination of dulcimers, psalteries, and strings, is based on a Mongolian folk tune. The sonic result is decidedly non-Western, approximating Chinese music with its decorative embellishments, modal harmonies, odd tunings, and utter lack of directionality. The piece is a sincere, unassuming memorial to a composer with whom Harrison worked, and whom he greatly admired.

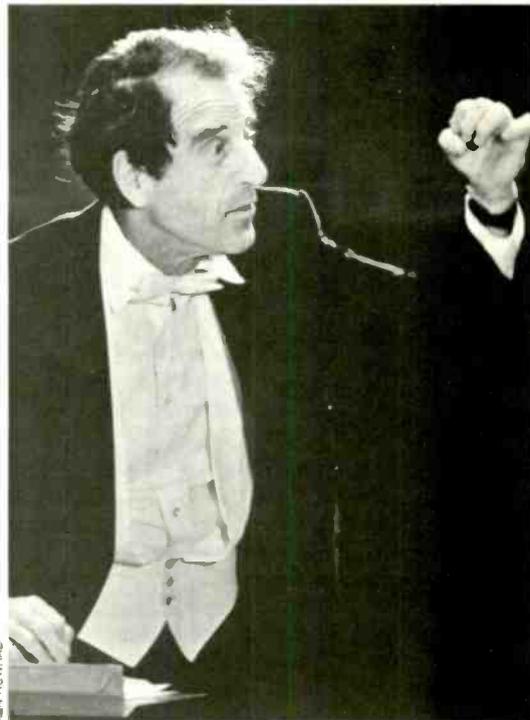
Vladimir Ussachevsky's *Divertimento 1980–1981* is scored for a traditional orchestra of strings, brass, woodwinds, and percussion—plus an unconventional contraption called the Electronic Valve Instrument (EVI), as well as recorded tape. Ussachevsky, a co-founder of the prestigious Columbia-Princeton Electronic Music Center and a pioneer in the realm of electronic music, capitalizes here on the sonic potential of the EVI, which is capable of mimicking the timbres of all members of the woodwind and brass families. How odd

then that this innovative instrument is paired with such conservative music: For most of its length, Ussachevsky's piece is in a symphonic style reminiscent of 1940s Americana. Tonal, forthright, jazz-influenced, occasionally dissonant, it sounds uncomfortably close to Copland's popular scores of that period.

Party Pieces has no EVI to hold the listener's attention, but it does have a charming precompositional gimmick. In the '40s, John Cage, Henry Cowell, Virgil Thomson, and Harrison were all living in New York City. Their party games apparently consisted of group composition: "One composer would write a bar of music and two notes, fold the paper at the bar line, and pass it on to the next composer, who would use the two notes as a starting point for his composition." The result was 19 miniature *Party Pieces* (1944–5), together lasting less than ten minutes, all remarkable for their lack of evident seams. The four composers obviously were closely attuned to each other's intentions; all the pieces are cohesive statements cast in a spare, rhythmic, often contrapuntal neoclassic idiom. They are performed here in Robert Hughes's skillful arrangement for winds and piano.

Leo Smit's *Academic Graffiti* (1962/82) rounds out this disc. Scored for soprano, clarinet, cello, piano, and 12 percussion instruments, it sets 11 irreverent quatrains by W. H. Auden, each concerning a historical figure. This is lightweight music, cast in a variety of styles ranging from atonal dissonance to dance-hall parody, the idioms often incongruously matched with the personality being discussed. Not surprisingly, the marvelously pointed Auden texts steal the show.

Though all four of the works on this recording have a certain charm, they hardly



Lukas Foss meets the moderns.

add up to a rewarding musical experience. In each case, the music is considerably less interesting than the programmatic, textual, or technological contrivance involved. Even more surprising is the fact that the Brooklyn Philharmonic is rarely given a chance to demonstrate its abilities: Of the four works, two are chamber music and two call for reduced orchestral ensembles. The playing is excellent throughout, but if a subsequent disc is planned, worthier music should be selected. After all, "Meet the Moderns" has shown us that there is much valuable material from which to choose.

K. ROBERT SCHWARZ

A PRIDE OF SOPRANOS

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otherwise lacks in the opera house, is someone to watch.

Finally, we have a new Hungaroton collection of arias sung by Eva Marton, who turned forty last June. This is a problematic release, yet it leads me to anticipate great results from this singer in the future.

Last November, with the Opera Company of Boston, Marton sang a Turandot of immense power, complete with total vocal control, dramatic perception, and a range of dynamic shadings that Birgit Nilsson never demonstrated. Since Rosa Raisa, who was the original Turandot, I had not heard anyone approach what Marton achieved in that performance. She looked wonderful on stage, and her voice was even from middle C to the easy top C that effortlessly rang over chorus and orchestra. Her soft singing had a velvet cover that reminded this listen-

er that Marton, like Raisa, is a middle European with lots of Italian training and experience. (Incidentally, Marton will be the Turandot in Los Angeles this summer when the Royal Opera House Covent Garden visits there during the Olympics.)

Thus, I expected great things from the Hungaroton disc, which contains recordings made between 1971 and '77. Its best point is the soprano solo from the Brahms *Requiem* (a live recording from 1971) that is beautiful in sound, artistically phrased, and spacious in its unhurried, broad phrasing. Equally moving is the scene from the Liszt *Legend of Saint Elisabeth*—once staged at the Met with Florence Easton and likely to return to opera houses in the 1986 Liszt observances. Here again, Marton is fully in command, and the music makes you want to hear the entire work.

Her Leonora is well managed, with thrilling sound and moving emotional impact, her brief Mendelssohn scene more

than adequate. The trouble comes in the "Liebestod," which, it must be hoped, is disastrous only because the singer stepped into the live concert on short notice and sang not only the "Liebestod" but also the *Four Last Songs*. The conducting is breathless, and Marton sounds uncharacteristically sharp, forced, and strident, and somehow just plain hectic.

It is still my conviction that within a year or two Marton will emerge as the next great Isolde and Brünnhilde. She will sing Brünnhilde in *Siegfried* this summer with the San Francisco Opera and is scheduled to appear on opening night at the Met next fall, as Ortrud opposite Plácido Domingo. Later that season she will switch to Elsa, and the following season she is expected to take up the Brünnhildes, first in *Die Walküre*. From what I heard in Boston, Marton has everything she needs, plus the firm intention of not becoming exclusively Wagnerian.

HF

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CHRISTINE McVIE

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ture, rather than just schlepping to Van Nuys [California] every night and coming home. I felt that it would be good for all of us to get away. The Mountain Studios were highly recommended. David Richards, the in-house engineer, is brilliant. So it seemed like the perfect place, and it was.

We used the hall where the Montreux Jazz Festival is recorded. We partitioned it off and did all our basic drum sounds and a lot of the vocals there.

Backbeat: Generally speaking, do you think the studio setting makes a big difference in the way a record turns out?

McVie: I can only speak for myself, really, but I think in my case, yes. In Montreux, we were in a bubble, the whole band and Russ, yet we could leave the door open—there weren't many people around and we weren't always being disturbed. And it was inspirational to be in a beautiful place.

Backbeat: Have you ever worked in an environment that was counterproductive?

McVie: Yes, ironically, when we recorded Fleetwood Mac's biggest seller, "Rumours." There was a studio where we had nothing but trouble. A tape machine that we nicknamed Jaws literally ate tape; pianos would never stay in tune—tedious things like that. We changed facilities.

Backbeat: What makes your songwriting partnership with Sharp work so well?

McVie: I've never actually written with a guitar player before, except in limited doses with Lindsey [Buckingham]. Guitarists play different chords and different configurations—different inversions, if you like. Yet Todd and I have similar writing habits. He just added a brightness and freshness to what I was doing.

Backbeat: Did you have any insecurities about having to write a whole album's worth of material? After all, it has been nearly 15 years since your last solo LP.

McVie: Some, but more importantly I felt that it might have been very self-indulgent to record only my songs. I find it hard to listen to solo albums all the way through. I think I'd get bored with myself, too. There's no need for me to do that, my ego isn't so inflated.

But looking at it another way, a solo album gives you the freedom to do exactly what you want, to pick someone else's song and say, "Wow, I'd really like to sing that." With Fleetwood Mac, I could never record a cover version.

Backbeat: A lot of the reviews, although favorable, have said "Christine McVie" sounds just like a Fleetwood Mac album.

McVie: I am a member of that band and I have been for 15 years. I've written one third of the songs and I'm one quarter of the musicians. So, I mean, it's inevitable. If something of me hasn't rubbed off. . . . It's rather silly to say that it sounds like a Fleetwood Mac record, really. It's bound to.

Backbeat: Maybe a different approach was

expected.

McVie: I felt that the one I took was obvious. Not the most experimental, perhaps, but it was the surest way I knew to go without putting myself out on a limb. I don't want to do that. Why should I? Obviously when you put something out on the market, not everyone's going to like it. Unless you're Michael Jackson.

Backbeat: Are you disturbed by the criticism that you and Fleetwood Mac aren't blazing any new musical trails?

McVie: That's very accurate though, isn't it? I'll leave the trailblazing to the eighteen-year-olds. There's so much music nowadays, it'd be pretentious for me to do a Thomas Dolby or something. I don't feel like it. I can do what I want.

Backbeat: How do you feel about the "rock video revolution"?

McVie: It forces you to think in another dimension, so it's good in that sense. But the question is, do we need that dimension? I've always felt that music should be heard and not seen. Music is so personal; you can let your own imagination work for you. Now the images are forced upon us, images that can be detrimental to a good song or very helpful to a bad one. If you don't have a "hip, happening video," then a good song may not get the airplay or the credit that it deserves. So it's a worrying thing for me. I mean, I've never written with a visual in mind, and a lot of bands now are doing just that. I suppose we older musicians have to enter the '80s graciously. **HF**

Selected Discography

CHRISTINE McVIE

Christine Perfect. Blue Horizon 7-63860, U.K.; 1970. (Rereleased in U.S. as **The Legendary Christine Perfect Album.** Sire SR 6022; 1978.)

Christine McVie. Warner Bros. 1-25059; 1984.

With FLEETWOOD MAC

Then Play On. Reprise RS 6368; 1969. (McVie uncredited due to contractual obligations.)

Kiln House. Reprise RS 6408; 1970. (Then Play On/Kiln House also available as a double-cassette package. Warner Bros. NA 23946.)

Future Games. Reprise RS 6465; 1971.

Bare Trees. Warner Bros./Reprise MSK 2278; 1972.

Penguin. Warner Bros./Reprise MS 2138; 1973.

Mystery to Me. Warner Bros./Reprise MSK 2279; 1973.

Heroes Are Hard to Find. Warner Bros./Reprise MS 2196; 1974.

Fleetwood Mac. Warner Bros./Reprise MSK 2281; 1975.

Rumours. Warner Bros. BSK 3010; 1977. (Fleetwood Mac/Rumours also available as a double-cassette package. Warner Bros. 1-23705.)

Tusk. Warner Bros. 2HS 3350; 1979.

Live. Warner Bros. 2WB 3500; 1980.

Mirage. Warner Bros. 1-23607; 1982.

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